

Report of Investigations No. 75

**THE SUBSURFACE SILURIAN-DEVONIAN
"BIG LIME" OF OHIO**

by

Gordon L. Owens

STATE OF OHIO
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF GEOLOGICAL SURVEY
Horace R. Collins, Chief

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The structure (pl. 1) and isopach (pl. 2) maps of the "Big Lime" of Ohio presented here are part of the continuing effort by the Division of Geological Survey to complete a series of maps on the subsurface strata in the State.

"Big Lime," a shortened form of the drillers' term "Big Niagaran Lime," refers to a sequence of limestones, dolomites, and evaporites of Middle Silurian through Middle Devonian age. With the exception of several counties in southwestern Ohio, the "Big Lime" is present throughout the State. Because only the subsurface "Big Lime" has been contoured, its map boundaries coincide with the base of the overlying Ohio or Olentangy Shale. The rocks of this interval outcrop over a large area in western Ohio but they are generally covered by varying thicknesses of glacial drift. The outcrop area was not studied in this investigation and therefore appears as a blank area on both the structure and isopach maps.

Stratigraphically the "Big Lime" lies beneath the thick Middle and Upper Devonian Ohio (locally Olentangy) Shale and above the Middle Silurian Rochester Shale. These contacts are shown on the inset gamma ray-neutron log of a well from the central part of the study area. The log shows the close proximity of the basal "Big Lime" to the underlying Dayton Formation and Albion Group. On this gamma ray-neutron log the Ordovician-Silurian systemic contact lies 48 feet below the base of the Albion Group.

The structure map of the sequence shows a maximum relief of 6,100 feet. One hundred and thirty miles separates the highest mapped elevations in Marion County (+900 feet) from the lowest in Monroe County (-5,200 feet) and the resulting dip is approximately 47 feet per

mile. The Bellefontaine Outlier in Logan County has not been considered in this structural comparison because a lack of control prevents accurate contouring of its 1,200-foot-plus elevations. Examination of gamma ray-neutron logs (hereafter referred to as logs) shows the contact between the "Big Lime" and the overlying shales is nearly unmistakable. This unconformable contact is easily recognized by sample examination also and should provide a good reflecting horizon for correlating seismic profiles. Control data from 785 wells were used in the construction of the structure map. Of this total, 599 elevations were obtained from logs, 152 from sample examinations, and 34 from drillers' logs. Log and sample elevations on the top of the unit correlate well and are considered accurate. The drillers' log elevations are considered to be the least accurate data used in establishing the "Big Lime" surface. Many of the elevations in Cuyahoga and Lake Counties are from drillers' logs and the map contours for this area are dashed to indicate less accurate control.

The isopach map shows in central and eastern Ohio a gradual west to east increase in thickness from under 200 to over 2,300 feet. Unconformities on top of and within the sequence are the major cause of this 2,100-foot differential. A maximum loss of stratigraphic section to these unconformities is shown in Adams and Pike Counties, where only 200 feet of "Big Lime" remains. The loss of section diminishes eastward toward the Appalachian Basin and reaches an Ohio minimum in Belmont and Monroe Counties where the thickness shown is 2,300 feet. Control is adequate to establish the 200-foot contour but extrapolation was employed to place the 2,300-foot contour. Subtle facies changes and gradual changes in

formation thickness are common in the basal portion of the sequence and in the underlying rocks, making the base of the interval progressively more difficult to identify eastward. By construction and examination of log and sample cross sections the base of the "Big Lime" was extended from areas of good definition (Erie County south through Hocking County) into areas where the base of the sequence is questionable. These same methods were used in establishing the top of the "Big Lime" and, by subtraction, its thickness. The resulting thicknesses are shown at each of the 680 control wells on the isopach map. Five hundred and sixty eight wells have log control, 95 have sample control, and 17 have control

from drillers' logs. Twelve of these 17 wells are located in Cuyahoga and Lake Counties and the dashed isopachs in these counties indicate weak control. The general regional thickening toward the Appalachian Basin is interrupted only by a small area of irregular thickness in Columbiana, Mahoning, and Portage Counties.

The structure and isopach maps should be excellent tools for estimating footage requirements for future wells and for locating anomalous areas in the "Big Lime" for further study.

The data tables summarize pertinent information for each well used in the construction of the maps.

ABBREVIATIONS

CM *Cement marker elevation*
 D *Density log*
 DF *Derrick floor elevation*
 Fr. *Fraction(al)*
 GL *Ground level elevation*
 GR *Gamma ray log*
 GRN *Gamma ray-neutron log*
 I *Induction log*

KB *Kelly bushing elevation*
 Q *Quarter of township*
 R *Range*
 Sec. *Section*
 T *Topographic map elevation*
 Tr. *Tract*
 Twp. *Township*
 VMSL *Virginia Military Survey Lot*

Township	Land division	Permit and/or map no.	Sample no.	Operator	Well no.	Lease name	Completion date	Elevation of well head (ft)	Depth to "Big Lime" (ft) Top Base	Elevation of "Big Lime" (ft) Top Base	Thickness of "Big Lime" (ft)	Total depth (ft)	Tops		
ADAMS COUNTY															
Jefferson	VMSL 2662	4	2030	Cabot	1-A	Bailey	11-22-64	714 KB	97	244	+617	+470	147	3790	GRN
Jefferson	VMSL 4040	5	1958	Commonwealth	1	Covert	10-12-65	624 KB	122	280	+502	+344	158	3829	GRN
ASHLAND COUNTY															
Clear Creek	Sec. 3	2214	1209	Floto	1	Troxel	11-4-65	1050 KB	1150	2155	-100	-1105	1005	4315	GRN
Jackson	Sec. 6	2448		Hoagland	1	Stentz	2-17-66	1251 KB	1675	2732	-424	-1481	1057	2943	GRN
Jackson	Sec. 7	2449		Hoagland	1	Welch	3-1-66	1245 KB	1656	2706	-411	-1461	1050	2959	GRN
Jackson	Sec. 21	1332		Rumbaugh	1	Rumbaugh	8-18-56	1180 T	1712	2768	-532	-1588	1056	2910	GRN
Lake	Sec. 2	1762	825	Stewart	1	Mosher	2-4-60	1190 DF	1927	2927	-737	-1737	1000	5485	GRN
Lake	Sec. 11	2419		M & G	1	Long	12-30-65	1099 DF	1821	2810	-722	-1711	989	3045	GRN
Milton	Sec. 1	1962	985	Ringler	1	Garlick	1-9-62	1100 T	1375	2374	-275	-1274	999	4550	Sample
Mohican	Sec. 23	2195		H & F	2	Stewart	10-22-63	947 T	1634	2655	-687	-1708	1021	2836	GRN
Orange	Sec. 20	2289	1417	Floto	1	Shoppell	9-13-64	1140 KB	1408	2412	-268	-1272	1004	4647	GRN
Orange	Sec. 35	2574	2006	Sunshine	1	Jones	5-3-67	1154 KB	1562	2600	-408	-1446	1038	4834	GRN
Perry	Sec. 11	2387	1677	M & G	4	Kehrs	8-28-65	1001 KB	1638	2676	-637	-1675	1038	5170	GRN
Ruggles	Lot 14 (4Q)	1784	845	Dalton & Hanna	1	Eshtruth	4-28-60	1112 DF	1260	2290	-148	-1178	1030	4441	GRN
Ruggles	3Q	2309	1563	Comanche	1	Crall	10-31-64	1080 KB	1118	2110	-38	-1030	992	4334	GRN
ASHTABULA COUNTY															
Andover	Lot 38	206	2138	McConnell	1	French & Papp	9-9-67	1063 KB	2452	3792	-1389	-2729	1340	6661	GRN
Ashtabula	Lot 16	16	615	Kaiser	1	Pinney	3-24-53	580 T	1338	2552	-758	-1972	1214	5320	Sample
Austinburg	Lot 48	91	847	Northern Natural	1-A	Judson	4-20-60	852 DF	1723	3040	-871	-2188	1317	3339	GRN
Conneaut	Lot 32	189		James	1	Schor	12-26-64	818 KB	1738	2872	-920	-2054	1134	3169	GRN
Conneaut	Lot 47	167		Tidal	1	Wallace	8-14-61	693 KB	1512	2646	-819	-1953	1134	2848	GRN
Dorset	Lot 4	138		Benedum	1-C	Lindholm-Baker	2-4-61	1089 KB	2285	3537	-1196	-2448	1252	3880	GRN
Harpersfield	Lot 35	196	1941	Horizon	1-H	Burkholder	6-21-66	857 KB	1721	3017	-864	-2160	1296	6200	GRN
Hartsgrove	Lot 31	82	826	Smith & Mouser	1	Roach	10-31-59	1085 KB	2012	3448	-927	-2363	1436	3738	GRN
Hartsgrove	Lot 67	99		Northern Natural	1-A	Musial	6-15-60	976 KB	1950	3375	-974	-2399	1425	3690	GRN
Jefferson	Lot 134	213		Quaker State	1	Kemmer	12-10-68	914 KB	1861	3135	-947	-2221	1274	6439	GR
Kingsville	Lot 32	27		Atlas	1	County Infirmary	8-9-60	780 T	1630	2780	-850	-2000	1150	3058	GRN
Lenox	Lot 15	96	846	Northern Natural	1-B	Harmon	5-16-60	1018 DF	1988	3285	-970	-2267	1297	3588	GRN
Monroe	Lot 1	73	818	McConnell	1	Brydle	12-16-59	860 KB	1758	2952	-898	-2092	1194	5710	GRN
Monroe	Lot 26	22		Benedum-Trees	1	Scribner	9-10-57	912 DF	1939	3127	-1027	-2215	1188	3440	GRN
Monroe	Lot 4S	69		Union Carbide	1	Takacs	9-28-59	898 DF	1836	3026	-938	-2128	1190	3314	GRN
Monroe	Lot 24	81		Britton	1	Adams	1-3-60	898 DF	1842	2981	-944	-2083	1139	3315	GRN
Morgan	Lot 40	88	835	Mouser	1	Jamison	3-21-60	880 T	1801	3100	-921	-2220	1299	3415	GRN
Orwell	Lot 2	131	898	Northern Natural	1	Hasznos	12-1-60	862 KB	1986	3389	-1124	-2527	1403	3703	GRN
Pierpont	Lot 15	102		Felmont	1	Burdick	8-29-60	1088 DF	2245	3439	-1157	-2351	1194	3742	GRN
Pierpont	Lot 33	97		Felmont	1	Clary	5-4-60	1000 T	2145		-1145		2364	GRN	
Plymouth	Lot 51	14	611	Northeastern	1	Humphrey	8-13-51	830 T	1620		-790		2359	Sample	
Richmond	Lot 16	98	851	Northern Natural	1	Romanowski	6-25-60	1067 DF	2281	3521	-1214	-2454	1240	3819	GRN
Rome	Lot 25	86	834	Wehmeyer	1	Kellogg	1-16-60	875 KB	1858	3263	-983	-2388	1405	3565	GR
Saybrook	Lot 6	21		Diamond Alkali	3	Wild	8-57	636 DF	1379	2595	-743	-1959	1216	2801	GRN
Trumbull	Lot 21	209		Lunar	2	Quayle	12-30-67	1073 DF	1998		-925		2340	GR	
Trumbull	Lot 30	191	1680	Horizon	1-H	Rhoa	8-12-65	983 KB	1895	3285	-912	-2302	1390	6750	GRN
Windsor	Lot 1 (R. 9)	103	852	Northern Natural	1	Clark	7-7-60	1064 KB	2188	3641	-1124	-2577	1453	3970	GRN
ATHENS COUNTY															
Bern	Sec. 26	1404	1026	Atlas	1	Christman	3-13-62	953 KB	3497	4514	-2544	-3561	1017	5003	GRN
Carthage	Sec. 29	1432	1089	Flagg	1	Chapman	4-7-63	720 KB	3416	4404	-2696	-3684	988	4983	GR
Dover	Sec. 4	1670		Poston	1	Shields	5-7-68	805 DF	2745	3639	-1940	-2834	894	4013	GRN
Dover	Sec. 17	1675		Poston	2	Dry Dock	11-2-68	671 DF	2524	3422	-1853	-2751	898	3758	GRN
Rome	Fr. 35	1395		Kramer & Huff	1	Burson	2-62	837 KB	3453	4444	-2616	-3607	991	4940	GR
Troy	Sec. 4	1426	1073	Atlas	1	Donfee	9-29-62	683 KB	3957		-3274		4109	GR	
Troy	Sec. 9	972	743	Putnam	1	Story	12-15-49	780 T	3935		-3155		4172	Sample	
Waterloo	Sec. 16	1431	1077	El Paso	1	Kisor	1-27-63	959 DF	2663	3451	-1704	-2492	788	3874	GRN
York	Sec. 5	107		Chartiers	2	Stratton	5-29-37	754 DF	2414	3189	-1660	-2435	775	3537	GRN

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BELMONT COUNTY															
Smith Union	Sec. 19 Sec. 4	108 129	40 166	Natural Gas W. Va. Texas	8 1	Mobley Gillespie	2-7-41 3-15-45	1174 1233	5452 5110	7357 7085	-4278 -3877	-6183 -5852	1905 1975	7887 7455	Sample Sample
CARROLL COUNTY															
Brown	Sec. 24W	288	971 2027 71	Beldon & Blake	1-A	Whitacre-Greer	7-6-67	1062 KB	3373	4903	-2311	-3841	1530	5305	GRD
Brown	Sec. 24E	212		Humble	1	Davies	12-21-61	1257 KB	3620	5298	-2363	-4041	1678	5825	GRN
Brown	Sec. 36	286		Stocker & Sitler	1	Clark	8-24-67	1182 KB	3707	5289	-2525	-4107	1582	8823	D
Monroe	Sec. 9	57		Brendel	1	Tipton	5-31-41	948	3545	5005	-2597	-4057	1460	5496	Sample
Monroe	Sec. 12	355		Vaught	1-A	German	6-12-68	989 KB	3472	4959	-2483	-3970	1487	5463	GRN
Rose	Sec. 3	375	2147	Stocker & Sitler	2	Little	8-24-68	1049 KB	3521	5030	-2472	-3981	1509	5480	GRN
Rose	Sec. 17	277		Stocker & Sitler	1	Summer	1-27-67	1130 KB	3470	4968	-2340	-3838	1498	5358	GRN
Rose	Sec. 29	242		Stocker & Sitler	1	Newhouse	9-4-66	1041 KB	3267	4760	-2226	-3719	1493	5210	GRN
Union	Sec. 35	330		Duchscherer	1	Grove	4-9-68	1241 KB	4078	5670	-2837	-4429	1592	6205	GR
COLUMBIANA COUNTY															
Butler	Sec. 7	162	282	Manufacturers	1	Wuthrick	9-17-45	1217 GL	3335	5300	-2118	-4083	1965	5654	Sample
Butler	Sec. 29	141	238	Natural Gas W. Va.	1	Randolph	5-28-45	1177 GL	3478	5385	-2301	-4208	1907	5801	Sample
Hanover	Sec. 10	539	1970	Atlas	1	Batzli	3-3-62	1221 KB	3636	5457	-2415	-4236	1821	5925	GRN
Hanover	Sec. 15	548		East Ohio Gas	2	Batzli	11-26-64	1237 KB	3699	5517	-2462	-4280	1818	5971	GRN
Hanover	Sec. 22	593		Quaker State	1	Gruber	4-13-68	1262 KB	3780	5613	-2518	-4351	1833	6088	GRN
Hanover	Sec. 34	559		East Ohio Gas	1	Burrows	9-13-66	1170 KB	3690	5519	-2520	-4349	1829	8956	GRN
Knox	Sec. 4	573		Western Hydrocarbons	1	Mile Branch Station	2-4-67	1075 DF	3131	4874	-2056	-3799	1743	5280	GRN
Knox	Sec. 8	587	421	Tri-State	2	Klopfenstein-Cameron	9-9-67	1170 KB	3273	5025	-2103	-3855	1752	5450	GRN
Madison	Sec. 14	219		Smith	1	Prescott	8-21-46	1006	4062		-3056		4327	Sample	
Madison	Sec. 22	187		Ohio Oil	1	Powell	1-24-46	1145 DF	4187		-3042		4474	Sample	
Madison	Sec. 23	223	420	Galey-Smith	1	McFarland	1-1-47	1151	4219		-3068		4482	Sample	
Salem	Sec. 36	328	401	Manufacturers	2	Halverstadt	7-17-51	1250 DF	3860	5760	-2610	-4510	1900	6200	GR
West	Sec. 11	567-A		Natural Gas W. Va.	1	Reamer	8-14-20	1275 GL	3460	5412	-2185	-4137	1952	5801	Sample
COSHOCTON COUNTY															
Bedford	Sec. 7	1203	761	National Associated	1	Gilmore	9-11-58	1060 T	2306	3258	-1246	-2198	952	3502	GRN
Bethlehem	Lot 22 (1Q)	794	863	Natol	1	Davis	1-3-56	1000 T	2453	3534	-1453	-2534	1081	3752	GR
Bethlehem	2Q	525		National Gas & Oil	1	Conrad	6-9-53	800 T	2161	3177	-1361	-2377	1016	3419	GR
Clark	1Q	1427		Pure	2	Patterson	9-12-60	1023 KB	2297	3370	-1274	-2347	1073	3674	I
Clark	Lot 1 (2Q)	1727		Midwest	C-1	Reed	7-27-65	798 DF	2138	3189	-1340	-2391	1051	3392	GRN
Crawford	Sec. 4	1825	1963	Kin-Ark	1	Cox	8-16-66	1201 KB	2840	4030	-1639	-2829	1190	6700	GRN
Jackson	Sec. 7	1269	1539	Arrowhead	1	Foster	1-24-59	856 DF	2309	3320	-1453	-2464	1011	3622	GRN
Jefferson	Sec. 9	1583		Jacobs	1	Bates	10-17-63	834 GL	2119	3145	-1285	-2311	1026	3402	Sample
Keene	Lot 11 (2Q)	1225		Sanders	1	Lowery	10-15-58	800 T	2303	3389	-1503	-2589	1086	3663	GRN
Keene	Lot 15	880		Roberson-Beisser	1	Gelb	6-11-66	809 DF	2479	3590	-1670	-2781	1111	3872	GRN
Mill Creek	Sec. 4	1390	781	Oxford	2	Bechtol	3-4-60	992 T	2421	3531	-1429	-2539	1110	3838	GRN
Mill Creek	Sec. 10	1257		National Associated	2	Lower	12-2-58	865 KB	2442	3573	-1577	-2708	1131	3921	GRN
Monroe	Sec. 9	1258		Campbell	2	Nicholl	5-59	975 T	2184	3180	-1209	-2205	996	3472	GRN
Monroe	Lot 11 (3Q)	1364		Weed	1	Stockli	11-7-59	1110 T	2280	3275	-1170	-2165	995	3508	GRN
Newcastle	Sec. 18	1406		Admiral	1	Funk	1960	1185 T	2230	3136	-1045	-1951	906	3389	GRN
Newcastle	Lot 8 (2Q)	1449	1326	Rixleben	1	Ringwalt	4-22-61	850 T	1790	2710	-940	-1860	920	2957	GRN
Perry	Sec. 6	1002		Bears	1	Rine	5-8-57	1122 DF	2112	2998	-990	-1876	886	3226	GRN
Perry	Sec. 13	1100		Bears	B-1	Conrad	12-17-57	1060 T	2158	3052	-1098	-1992	894	3299	GRN
Pike	Sec. 6	1450		Natol	1	Gault	4-27-61	815 T	1821	2730	-1006	-1915	909	2965	GR
Pike	Sec. 23	1348		Bears	1	McKee	10-22-59	930 T	2102	3007	-1172	-2077	905	3265	GRN
Tiverton	Sec. 8	1379	1292	Bears	A-1	Day	1-14-60	1000 T	2032	2977	-1032	-1977	945	3214	GRN
Tiverton	Sec. 22	1061		Disbennett	1	Fox	10-8-57	1020 T	2128	3065	-1108	-2045	937	3281	GRN
Washington	Sec. 21	1292		Kewanee	1	Martin	3-21-59	802 CM	2252	3224	-1450	-2422	972	3658	GRN
CRAWFORD COUNTY															
Chatfield	Sec. 34	50	1743	Hawkins	1	Leonhart	10-12-65	1000 T	284		+716		3774	Sample	
Jackson	Sec. 27	2	1326	Wehmeyer	1	Shumaker	11-60	1133 T	728		+405		803	GRN	
Jefferson	Sec. 13	46		Sun	1	App	8-1-65	1126 KB	563	1325	+563	-199	762	3400	GRN
Jefferson	Sec. 23	27		V-T; Cheswell	1	Eichhorn	7-27-64	1085 KB	528	1283	+557	-198	755	3390	GRN

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									Top	Base	Top	Base			
Liberty	Sec. 15	12	1496	Vandever	1	Brause	3-19-64	1030 KB	287	1113	+743	-83	826	3150	GRN
Polk	Sec. 26	30		Sun	1	Ricker	7-31-64	1102 KB	540	1286	+562	-194	756	3375	GRN
Sandusky	Sec. 22	16	1258	Vandever	1	Ruth	4-6-64	1062 KB	377	1190	+685	-128	813	3275	GRN
Vernon	Sec. 3	6		Haynes	1	Crum	1-9-63	1087 DF	715	1151	+372	-464	836	3879	GRN
Vernon	Sec. 5	40	1444	Mt. Carmel	1	Strohn-Snyder	11-11-64	1084 GL	630	1495	+454	-411	865	3500	Sample
Vernon	Sec. 33	8		Sun	1	Krichbaum	2-20-64	1130 KB	718	1508	+412	-378	790	3560	GRN
Whetstone	Sec. 10N	49	1718	Katex	1	Wagner	9-28-65	1047 KB	380	1118	+667	-71	738	3150	GRN
Whetstone	Sec. 33	15	1574	Vandever	1	Kuehnle	4-25-64	1029 KB	347	1075	+682	-46	728	3050	GRN
CUYAHOGA COUNTY															
Bedford	Lot 43	-6-13		East Ohio	2	Hladik	8-31-22	945	1600		-655			2825	Driller's
Bedford	Lot 61	-6-15		Pearson & Stephens	1	Carey	11-4-22	614	1300		-686			2550	Driller's
Brecksville	Lot 42	85		Hanley & Bird	1	Linberg	8-15-44	1140 T	1870	3340	-730	-2200	1470	3591	Driller's
Brecksville	Lot 58	-8-18		Dempsey	1	Bartlett	8-4-41	880	1685	3216	-805	-2336	1531	3433	Driller's
Cleveland	Lot 88	389	879	Standard	1	Standard	6-19-60	645			-526			2000	Sample
Cleveland	Whiskey Is.	CH-1		International	1	International	8-56	583 GL	968		-385			2398	GRN
Euclid	Lot 58	-9-1		Hoey & White	1	White	4-18-46	820 T	1390	3066	-570	-2246	1676	3268	Driller's
Independence	Lot 6	-5-6		Baba	1	Baba	5-22-15	625 GL	1295		-670			2940	Driller's
Independence	Lot 18	288		Hamm	1	Miller	9-28-39	780 GL	1355	2859	-575	-2079	1504	3021	Driller's
Mayfield Heights	Lot 16	52		Benedum-Trees	2	Ford	11-2-39	1055 T	1558		-503			2895	Driller's
Middleburg	Sec. 15	-5-41		East Ohio Gas	1	Jenkins	6-25-26	780 GL	1335	2710	-555	-1930	1375	2938	Driller's
Middleburg Heights	Sec. 6	-6-17		Berea	1	Haak	1-20-17	800 T	1255	2690	-455	-1890	1435	2854	Driller's
Olmsted	Tr. 3	18		East Ohio Gas	1	Surman	2-10-37	792 T	1225	2535	-433	-1743	1310	2675	Driller's
Olmsted	Tr. 3	16		Ohio Fuel Gas	1	Muche	10-29-36	791 GL	1228	2536	-437	-1745	1308	2743	Driller's
Rockport	Sec. 9	659PP	357A	Blodgett	1	City of Cleveland	5-6-68	780 T	1179		-399			1500	GR
Royalton	Sec. 6	212		Ohio Fuel Gas	1	Gayer & Jusak	8-4-54	831	1525		-694			3159	Driller's
Royalton	Sec. 17	93		Dempsey	1	Arnold & Bayer	10-10-45	1120 T	1795	3227	-675	-2107	1432	3438	Driller's
Solon	Lot 19	249		Reserve	1	Plechaty	5-17-55	940 GL	1770		-830			3654	Driller's
Solon	Lot 36	-4-21		Hoey	1	Glover	11-3-47	1035 GL	1910	3491	-875	-2456	1581	3741	Driller's
Strongsville	Lot 11	-6-30		Dillon	1	Kulous	2-27-33	935 GL	1538	2934	-603	-1999	1396	3138	Driller's
Strongsville	Lot 43	-9-25		Ohio Fuel Gas	1	Tallak	5-14-32	1026 GL	1640	2970	-614	-1944	1330	3115	Driller's
DEFIANCE COUNTY															
Adams	Sec. 16	4-A	753	Archbold	1	Harper	1949	745 GL	195		+550			1925	Sample
Adams	Sec. 34	3-A	377-A	Niswander	1	Richland-Adams Twp. School	1947	720 T	145		+575			295	Sample
Farmer	Sec. 29	31	1065	Wand	1	Saltzman	1-15-63	735 KB	258	1000	+477	-265	742	3205	GRN
Farmer	Sec. 31	32	1155	Rovell	1	Smith	9-16-63	785 T	250		+535			2048	Sample
Mark	Sec. 4	17		Sohio	1	Brown	10-23-59	722 KB	183	920	+539	-198	737	1828	GRN
Mark	Sec. 9	15	807	Brown	1	Smucker	8-5-59	726 T	140		+586			1793	Sample
Noble	Sec. 3	12PP		Perry & Beck	1	Brown		705 T	140		+565			2038	
Washington	Sec. 32	20	961	Maumee Valley	1	Boland	12-11-61	715 T	122		+593			1795	Sample
DELAWARE COUNTY															
Berkshire	Lot 4 (1Q)	188		Kin-Ark	1	Schultz	10-8-64	966 KB	469	1151	+497	-185	682	3175	GRN
Berkshire	Lot 3 (3Q)	129	1492	Eastern	1	Alexander	7-27-64	951 KB	403	1067	+548	-116	664	3019	GRN
Berlin	Lot 26 (2Q)	212		Lohman-Johnson	1	Havens	12-3-64	952 KB	169	820	+783	+132	651	2800	GRN
Berlin	Lot 6 (4Q)	206	1423	Algonquin	1	Sleamons	11-19-64	863 KB	215	867	+648	-4	652	2803	GRN
Brown	Lot 1 (1Q)	162		Alum Creek	1	Call	10-23-64	974 DF	338	1029	+636	-55	691	3117	GRN
Brown	Lot 10 (4Q)	136		Algonquin	1	Link	8-17-64	935 DF	283	930	+652	+5	647	1726	GRN
Delaware	Lot 8 (4Q)	60		Skiles Central	1	Hough	6-11-64	886 KB	35	680	+851	+206	645	2632	GRN
Genoa	Lot 6 (1Q)	245		Lewis	3	Everts	2-23-65	956 GL	498		+458			546	GRN
Genoa	Lot 11 (3Q)	227	1457	Hadson Ohio	1	Martin	12-31-64	922 KB	369	1033	+553	-111	664	3040	GRN
Harlem	Lot 4 (1Q)	146	1421	Federal	1	Fronk	11-17-64	1083 DF	800	1470	+283	-387	670	3609	GRN
Harlem	Lot 1 (3Q)	77	1288	Algonquin	1	Paul	6-27-64	1037 DF	719	1350	+318	-313	631	3320	GRN
Kingston	Lot 29 (2Q)	28	1225	Sun	1	Sheets	3-11-64	978 KB	289	1043	+689	-65	754	3809	GRN
Kingston	Lot 4 (4Q)	29		Ferrell	1	Daily	2-29-64	992 KB	433	1140	+559	-148	707	3260	GRN
Liberty	Lot 6 (1Q)	246		Kin-Ark	1	Smith	2-28-65	885 KB	60	757	+825	+128	697	3116	GRN
Liberty	Lot 41 (4Q)	157	1425	Federal	1	Halley	10-10-64	895 DF	63	704	+832	+191	641	2574	GRN

Township	Land division	Permit and/or map no.	Sample no.	Operator	Well no.	Lease name	Completion date	Elevation of well head (ft)	Depth to "Big Lime" (ft)		Elevation of "Big Lime" (ft)		Thickness of "Big Lime" (ft)	Total depth (ft)	Tops
									Top	Base	Top	Base			
Orange	Lot 15 (2Q)	161		Kin-Ark	1	English	9-10-64	944 KB	252	905	+692	+39	653	2982	GRN
Orange	Lot 11 (3Q)	1	402	Wise	1	Vance	5-15-37	920 GL	130	810	+790	+110	680	4291	Sample
Oxford	Lot 15 (1Q)	13		Sun	1	Appleman	2-25-63	985 KB	160	990	+825	-5	830	3100	GRN
Oxford	Lot 7 (4Q)	222		H. & K.	1	Bell	12-7-54	984 KB	323	1002	+661	-18	679	3056	GRN
Porter	Lot 7 (2Q)	39		T & W	1	Nininger	6-64	1140 KB	756	1473	+384	-333	717	3512	GRN
Porter	Lot 11 (3Q)	43		Brehm	1	Dible	10-5-64	1087 KB	710	1407	+377	-320	697	3455	GRN
Trenton	Sec. 2	172	1384	Hudson Ohio	1	Richardson	9-21-64	1087 KB	799	1483	+288	-396	684	3601	GRN
Trenton	Fr. sec. 13	171	1402	Hudson Ohio	1	Clevenger	10-3-64	1080 KB	762	1430	+318	-350	668	3565	GRN
Troy	Lot 1 (2Q)	180	1440	Floto	1	Hills	12-5-64	943 DF	45	697	+898	+246	652	2561	GRN
ERIE COUNTY															
Berlin	Lot 9-6 (2Q)	9	1117	Floto & Mammoth	1	Willis	7-10-63	664 DF	383	1493	+281	-829	1110	3523	GRN
Berlin	Lot 5-8 (4Q)	13	1957	Bebout	1	Hills & Hodges	7-25-66	772 T	510	1650	+262	-878	1140	3720	Sample
Florence	Lot 97 (1Q)	12	2256	Sun	1	Schlechter	8-11-66	826 KB	637	1777	+189	-951	1140	3970	GRN
Florence	Lot 54 (2Q)	25	2043	Tra-Kay	1	Griffith	1-19-67	831 KB	662	1814	+169	-983	1152	3985	GRN
Florence	Lot 48 (4Q)	7	887	Ohio Fuel Gas	1	Saylor	10-15-60	819 DF	658	1775	+161	-956	1117	4417	GRN
Huron	Lot 32 (tr. 1)	5	695	Nickel Plate	1	N. Y., Chicago & St. Louis RR.	4-16-56	580 T	175	1287	+405	-707	1112	1350	Sample
Oxford	Belden Tr. (3Q)	10		Long	1	Wensink	12-23-64	710 DF	120	1160	+590	-450	1040	3045	GRN
Vermillion	Lot 9 (tr. 1)	21	1974	Murphy	1	Kukes	11-5-66	764 KB	595	1748	+169	-984	1153	3910	GRN
Vermillion	Lot 6 (tr. 3)	28	1993	E. & W.	1	Peck	4-10-67	630 DF	443	1580	+187	-950	1137	3710	GRN
FAIRFIELD COUNTY															
Amanda	Sec. 30	195	438	Lancaster	1	Brown	5-1-51	910 T	770	1400	+140	-490	630	3263	Sample
Clear Creek	Sec. 15	434	1654	Clark	1	Thomas	9-3-65	1099 KB	1105	1610	-6	-511	505	3772	GRN
Clear Creek	Sec. 33	435	1643	Clark	1	Huffines	8-19-65	1027 KB	984	1520	+43	-493	536	3662	GRN
Liberty	Sec. 34	453	1981	Hunting	1-A	Fisher	12-31-66	842 DF	1050	1650	-208	-808	600	3764	GRN
Madison	Sec. 18	436	1652	Clark	1	Trimmer	8-27-65	898 KB	1033	1556	-135	-658	523	3740	GRN
Pleasant	Sec. 34	192	280	City	1	Hallern	11-7-50	850 GL	1430	2070	-580	-1220	640	2293	Sample
Pleasant	Sec. 36	465		Hunting	2-A	Raab	12-20-67	862 DF	1471	2134	-609	-1272	663	4345	D
Richland	Sec. 9	388		Kubat	1	Hager	5-29-62	1007 DF	1730	2400	-723	-1393	670	2635	GRN
Richland	Sec. 32	387		Kubat	1	Neeley	5-22-62	997 DF	1647	2335	-650	-1338	688	2614	GRN
Rush Creek	Sec. 8	452		Hunting	1	Thomas	11-23-66	990 DF	1677	2351	-687	-1361	674	4527	GRN
Rush Creek	Sec. 27	314		Clay	1	Schmeltzer	4-10-61	787 DF	1635	2319	-848	-1532	684	2541	GRN
Rush Creek	Sec. 36	328		Blackhawk	1	Poling	7-29-61	792 DF	1718	2420	-926	-1628	702	2696	GRN
Violet	Sec. 8	412	1254	Stewart	1	Camden	4-2-64	819 DF	638	1215	+181	-396	577	3271	GRN
Violet	Sec. 12	440	1846	Stewart	1	Whims	1965	894 DF	890	1490	+4	-596	600	3638	GRN
Walnut	Sec. 15	210	775	National	2	Holliday	3-12-52	910 T	1490		-580			2296	Sample
Walnut	Sec. 19N	446		Hunting	1-A	Taggart	8-24-66	924 DF	1263	1869	-339	-945	606	3996	GRN
FRANKLIN COUNTY															
Columbus	State House	570	466				1860	760 GL	138		+622			2775	Sample
Madison	Sec. 13	11	1410	Kingwood	1	Reeb	11-12-64	784 KB	510	1081	+274	-297	571	3200	Sample
Madison	Sec. 12S	15	1705	Hudson Ohio	1	Long	12-3-65	793 KB	540	1075	+253	-282	535	3152	GRN
FULTON COUNTY															
Amboy	Sec. 11		416	Ohio Drilling	1	Village of Metamora	1946	726 GL	349		+377			1294	Sample
Chesterfield	Sec. 16	22	1194	North American	1	Deyo	11-27-63	815 KB	572	1639	+243	-824	1067	3215	GRN
Chesterfield	Sec. 26	21	1099	American Liberty	1	Jones	5-15-63	814 KB	529	1552	+285	-738	1023	3100	GRN
Chesterfield	Sec. 31	13	804	McClure	1	Keefer	7-2-59	733 KB	433	1430	+300	-697	997	2811	GRN
Clinton	Sec. 17	17		Kubat-Wehmeyer	1	Vonier	6-23-61	758 DF	371	1323	+387	-565	952	2874	GRN
Clinton	Sec. 19	16-A	653	Stevens	1	Thierry	3-28-47	748 GL	330		+418			2200	Sample
Clinton	Sec. 21	1964		Maguire	1	Nofziger	8-19-56	777 KB	363	1295	+414	-518	932	3012	GRN
Clinton	Sec. 33	26-A	654	Grim	1-B	Murphy	10-5-46	766 GL	330		+436			2126	Sample
Dover	Sec. 5S	1	657	Stevens	1	Vonier	7-18-36	760 GL	390		+370			2303	Sample
Fulton	Sec. 10	26	1811	Liberty	1	Slahunek	12-27-65	723 DF	295	1300	+428	-577	1005	3024	GRN
Fulton	Sec. 32S	28	812	Liberty	1	Fauble	2-26-66	743 DF	288	1273	+455	-530	985	3120	GRN
German	Sec. 13	29-A	51	Stevens	1	Roth	9-7-36	710 T	368	1435	+342	-725	1067	2257	Sample
Gorham	Sec. 19	24	1474	McClure	1	Gamble	1-65	820 DF	568	1568	+252	-748	1000	3303	GRN
Gorham	Sec. 19	36		McClure	1	Erbskorn	8-24-67	806 GL	579	1566	+227	-760	987	3201	GRN
Pike	Sec. 32N	16	911	Dunn	1	Kirkendall	3-6-61	771 DF	466	1489	+305	-718	1023	3094	GRN

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									Top	Base	Top	Base			
Swan Creek	Sec. 10S	33-A	107	Yaslick & Pember	1	Baker	9-14-42	678 GL	115	1100	+563	-422	985	1965	Sample
Swan Creek	Sec. 22	12	713	Ohio Oil	1	Munn	8-26-56	680 GL	154	1087	+526	-407	933	1988	Sample
York	Sec. 8	18	1012	Covey & Null	1	Neuswander	5-30-62	758 DF	358	1317	+400	-559	959	2866	GRN
GALLIA COUNTY															
Perry	Sec. 28	110	915	Waggoner	1	Gills	4-12-61	636 DF	2467	3143	-1831	-2507	676	3447	GRN
Perry	Sec. 34	112	935	Waggoner	1	Davis	7-2-61	635 GL	2540	3250	-1905	-2615	710	3643	Sample
Walnut	Sec. 6	117		B. E.	1	Wagoner	9-28-62	644 T	2362	3021	-1718	-2377	659	3347	GRN
Walnut	Sec. 9	107	903	H., H., & R.	1	Baker	2-5-61	681 DF	2553	3245	-1872	-2564	692	3631	GRN
GEAUGA COUNTY															
Auburn	Lot 5W (tr. 1)	4	294	Ohio Fuel Gas	1	Brewster	8-24-44	1176 GL	2154		-978			4544	Driller's
Burton	Lot 2 (2Q)	14		Best	1	Caton	9-29-58	1183 GL	2149		-966			3970	Driller's
Chardon	Lot 1 (tr. 1)	D-1	64	East Ohio Gas	1	Crile	2-7-41	1031 GL	1790	3350	-759	-2319	1560	6101	Sample
Chester	Lot 26 (tr. 1)	7	409	Galey	1	Cleveland Trust	12-29-48	1147 DF	1950	3526	-803	-2379	1576	3815	Sample
Chester	Lot 6 (tr. 2)	2	193	Benedum-Trees	1	White	11-22-40	1149 GL	1875	3477	-726	-2328	1602	3958	Sample, driller's
Hambden	Lot 4 (NE $\frac{1}{4}$)	9	417	Galey	1	Davis	5-26-49	1197 GL	2094		-897			2547	Sample
Munson	Lot 3 (NE $\frac{1}{4}$)	10	496	Best	1	Laing	5-13-52	1248 GL	2170		-922			3448	Driller's
Newbury	Lot 9 (SE $\frac{1}{4}$)	3	296	Northern Ordnance	1	Coppedge	8-23-44	1210 GL	2163	3715	-953	-2505	1552	4000	Sample
GUERNSEY COUNTY															
Adams	Sec. 15	782	925	Lake Shore	2	Marshall	5-31-61	1007 DF	3196	4390	-2189	-3383	1194	3383	GRN
Adams	Sec. 16	799-A	7	Ohio Oil	1	Marshall	5-27-41	1019 GL	3249	4505	-2230	-3486	1256	4902	Sample
Center	Sec. 2	334	118	Ohio Oil	1	Fitzgerald	5-14-43	858 GL	3590	5058	-2732	-4200	1468	5476	Sample
Spencer	Sec. 5	839		Duchscherer	1	Keith	8-20-68	1000 KB	3473	4645	-2473	-3645	1172	3584	GRN
Westland	Sec. 21	817	2009	Wiser	1	Salliday	5-15-67	1005 GL	3480		-2475			3608	Sample
Westland	3Q	434	293	Ohio Fuel Gas	1	Neptune	10-22-47	984 GL	3345		-2361			3522	Sample
Westland	3Q	851		Ridge	1	Stade	9-12-68	989 KB	3366	4534	-2377	-3545	1168	4960	D
Valley	Sec. 11	832	2205	Duchscherer	1	LePage	8-6-68	965 KB	3610	4872	-2645	-3907	1262	5284	GRN
HARRISON COUNTY															
Franklin	Sec. 10	95		East Ohio Gas	1	Shuss	6-11-62	1087 KB	3933	5390	-2846	-4303	1457	5854	GRN
Freepoint	Sec. 10	438-A	478	East Ohio Gas	1	McCullough	6-2-24	966 GL	3971	5548	-3005	-4582	1577	5908	Sample
German	Sec. 23	15	33	Columbian Carbon	1	Miller	2-13-39	1223 GL	4595		-3372			5250	Sample
North	Sec. 7	101	2095	Pan American	1	Luneman	3-8-68	1089 KB	4085	5653	-2996	-4564	1568	6149	GRN
Stock	Sec. 20	27	74	Brendel	1	West	6-18-41	953 GL	3930	5564	-2977	-4611	1634	5966	Sample
Stock	Sec. 22	28	77	East Ohio Gas	1	Cranblett	6-29-41	982 GL	3945	5598	-2963	-4616	1653	6004	Sample
Stock	Sec. 32	39	152	Texas	1	Mizer	1-24-45	921 GL	4120	5950	-3199	-5029	1830	6301	Sample
Washington	Sec. 2	-1-2	2	Ohio Oil	1	Blackwell	7-26-41	1135 GL	4230	5860	-3095	-4725	1630	6255	Sample
Washington	Sec. 32	93		Atlas	1	Gunning	5-7-62	1221 KB	4014	5450	-2793	-4229	1436	5985	GRN
Washington	Sec. 33	32	10	Ohio Oil	1	Phillips	11-12-41	1148 GL	3952	5392	-2804	-4244	1440	5975	Sample
HENRY COUNTY															
Freedom	Sec. 23	20	907	Lesh	1	Badenhop	12-25-60	718 KB	238	1087	+480	-369	849	2636	GRN
Ridgeville	Sec. 20	19		Frey	1	Frey	1961	720 DF	278	1100	+442	-380	822	3366	GRN
HOCKING COUNTY															
Benton	Sec. 19		664	Ohio Fuel Gas	2	Mattox	6-4-55	713 GL	1204	1845	-491	-1132	641	2017	Sample
Benton	Sec. 33	611	738	Kewanee	1	Amerine	4-15-58	1061 T	1714	2367	-853	-1306	653	2648	GRN
Falls	Sec. 2	1119		Stewart	3	Ucker	5-20-65	882 DF	1877	2523	-995	-1641	646	2796	GRN
Falls	Sec. 13	1330		Kentucky Drilling	3	Graham	9-18-67	721 DF	1725	2375	-1004	-1654	650	2643	GRN
Falls	Sec. 35	394	606	Adair	1	Mount	9-4-53	920 T	1895	2532	-975	-1612	637	2826	GRN
Falls Gore	Sec. 27	1061		Stewart	1	Souders	7-8-63	880 T	2089	2819	-1209	-1939	730	3084	GRN
Falls Gore	Sec. 30	804		Oxford	1	Geil-Malone	5-26-61	860 T	1873	2562	-1013	-1702	689	2830	GRN
Green	Sec. 1	1247		Quaker State	7	Natco	8-22-66	847 DF	2153	2890	-1306	-2043	737	3267	GRN
Green	Sec. 3	1195		Kentucky Drilling	3	Conner	6-11-66	782 DF	2057	2780	-1275	-1998	723	3078	GRN
Green	Sec. 15	1347		Stewart	1	Bond	10-31-67	843 DF	2050	2753	-1207	-1910	703	3019	GRN
Laurel	Sec. 17	430	641	Ohio Fuel Gas	1	Featherolf	10-12-54	1093 GL	1565	2230	-472	-1137	665	2388	Sample
Marion	Sec. 13	828		Blackhawk	1	Dozer	8-1-61	1017 DF	1983	2687	-966	-1670	704	2950	GRN
Marion	Sec. 33	1321	2069	Kentucky Drilling	1-A	Brown	8-20-67	973 DF	1800	2441	-827	-1468	641	2685	GRN
Marion	Sec. 35	1005		Stewart	2	Sexton	10-62	982 DF	1872	2537	-890	-1555	665	2813	GRN
Starr	Sec. 27	1333		Viking	1	Logan	9-25-67	1027 DF	2194	2877	-1167	-1850	683	3216	GRN

Township	Land division	Permit and/or map no.	Sample no.	Operator	Well no.	Lease name	Completion date	Elevation of well head (ft)	Depth to "Big Lime" (ft)		Elevation of "Big Lime" (ft)		Thickness of "Big Lime" (ft)	Total depth (ft)	Tops	
									Top	Base	Top	Base				
Starr	Sec. 31	1222	1948	Huggins	1	Hockman	12-15-66	970 KB	2144	2875	-1174	-1905	731	6495	GRN	
Ward	Sec. 33	1123		Quaker State	1	Helm	1-4-67	713 DF	2044	2800	-1331	-2087	756	3131	GRN	
Washington	Sec. 16	720		Basin	1	Foraker	11-5-60	972 DF	1910	2534	-938	-1562	624	2823	GRN	
Washington	Sec. 27	843		Wray	2	Christel	8-2-61	962 DF	1919	2540	-957	-1578	621	2828	GRN	
HOLMES COUNTY																
Berlin	Sec. 10	1115	1175	Arrowhead	1	Hochstetler	1-30-60	1181 DF	2590	3722	-1409	-2541	1132	4049	GRN	
Berlin	Sec. 12	1279		Amerada	1	Geib	12-1-63	1088 KB	2661	3848	-1573	-2760	1187	6693	GRN	
Clark	Sec. 18	1297		Kin-Ark	1	Erb	7-28-64	1123 KB	2810	4010	-1687	-2887	1200	6830	GRN	
Hardy	Sec. 4	1038		Miller	1	Fair	5-29-59	900 T	2058	3155	-1158	-2255	1097	3433	GRN	
Hardy	Sec. 20	1094		Chapman	1	Reining	10-29-59	1070 T	2355	3448	-1285	-2378	1093	3790	GRN	
Killbuck	Sec. 1	982	793	United	1	Kasner	10-7-58	863 GL	1993	3054	-1130	-2191	1061	3289	GRN	
Killbuck	Sec. 21	1048		Nepple	C-1	Nyhart	5-27-59	910 GL	2043	3079	-1133	-2169	1036	3300	GRN	
Knox	Sec. 22	1006		Patten	1	Wallace	12-18-58	1080 GL	1910	2870	-830	-1790	960	3078	GRN	
Mechanic	Sec. 10W	995		Davis	1	Weltbrecht	11-3-58	1173 DF	2465	3541	-1292	-2368	1076	3788	GRN	
Mechanic	Sec. 20W	990		National	1	Wagers	10-14-58	980 KB	2331	3419	-1351	-2439	1088	3742	GRN	
Monroe	Lot 4 (3Q)	949	1169	Heldt	1	Crosby	5-30-58	1140 GL	2161	3236	-1021	-2096	1075	3460	GRN	
Monroe	Lot 14 (4Q)	987		Heldt	1-C	Purdy	10-23-58	1009 GL	2077	3141	-1077	-2141	1064	3366	GRN	
Prairie	Sec. 7	1092		Fields	2	McCurdy	10-13-59	1114 KB	2167	3254	-1053	-2140	1087	3511	GRN	
Prairie	Sec. 33	1139		Buckeye	1	Feagain	8-30-60	842 DF	1960	3055	-1118	-2213	1095	3377	GRN	
Salt Creek	Sec. 25	1283		Parker & Chapman	1	Troyer	11-12-63	1314 KB	2682	3876	-1368	-2562	1194	7369	GRN	
Salt Creek	Lot 14 (tr. 2)	1214	1930	Chapman & Parker	1	Brown	3-2-62	977 DF	2317	3485	-1340	-2508	1168	3727	GRN	
Walnut Creek	Sec. 5	1351		Kin-Ark	1	Garber-Miller	5-9-66	1203 GL	2808	4055	-1605	-2852	1247	6820	Sample	
Washington	Sec. 6	1299		Harris	1	Baldner	7-26-64	1274 KB	1817	2748	-543	-1474	931	5179	GRN	
HURON COUNTY																
Bronson	Lot 9 (4Q)	81	1942	Lake Shore	1	Knupke	1-26-68	919 DF	606	1601	+313	-682	995	3654	GRN	
Bronson	Lot 32 (4Q)	58		Kin-Ark	1	Lawrence-Hester-Hettle	6-27-66	833 KB	470	1422	+363	-589	952	3672	GRN	
Clarksfield	Lot 3 (2Q)	72		Reliance	1	Leitner	3-13-67	914 DF	828	1952	+86	-1038	1124	4191	GRN	
Clarksfield	Lot 23 (4Q)	69		Lake Shore	1	Spoerr	1-8-67	943 KB	816	1895	+127	-952	1079	4134	GRN	
Fitchville	Lot 31 (3Q)	43		Kin-Ark	1	Clayton-Crecelius	9-22-65	1003 KB	766	1787	+237	-784	1021	3902	GRN	
Fitchville	Lot 46 (4Q)	74	1461	Ashland	1	Reddick	2-27-67	998 KB	837	1818	+161	-820	981	3978	GRN	
Greenfield	Lot 9 (4Q)	33		Bradley	1	Smith	9-14-64	880 DF	432	1355	+448	-475	923	3286	GRN	
Hartland	Lot 1 (2Q)	67		Holtom	1	Metz-Kettel	1-18-67	934 DF	722	1780	+212	-846	1058	3907	GRN	
Hartland	Lot 6 (4Q)	60		Stocker & Sittler	1	Ernsberger-Gerstensburger	7-9-66	955 KB	733	1769	+222	-814	1036	3975	GRN	
Lyme	Lot 27 (1Q)	41		Southern Union	1	Yingling	3-9-65	794 KB	104	1062	+690	-268	958	2955	GRN	
New Haven	Lot 105	39	1515	Stocker & Sittler	1	Jopland-Chapman	11-5-64	966 DF	658	1570	+308	-604	912	4300	GRN	
New London	Lot 20 (3Q)	40		Colorado	1	Rumbaugh	1-7-65	949 KB	868	1937	+81	-988	1069	4150	GRN	
New London	Lot 14 (4Q)	38		Hudson Ohio	1	Johnson	11-5-64	989 KB	947	2005	+42	-1016	1058	4300	GRN	
Norwich	Lot 14 (4Q)	35		Horn	1	Hillis	10-25-64	914 DF	320	1205	+594	-291	885	3145	GRN	
Peru	Lot 2 (2Q)	11		163-B	White	1	Arting	11-22-37	749 GL	260	1052	+489		4270	Sample	
Richmond	Lot 5 (3Q)	30	1237	Reliance	1-A	Neidermeier	12-5-63	957 DF	393	1260	+564	-303	867	3249	GRN	
Ripley	Lot 33 (1Q)	36		Hudson Ohio	1	Willett	10-4-64	1044 KB	871	1810	+173	-766	939	3939	GRN	
Townsend	Lot 58	50		Hefner	1	Hyde	3-30-66	884 KB	668	1747	+216	-863	1079	3825	GRN	
Townsend	Lot 128	76		2000	Ashland	1	Bonigut & Hahn	4-27-67	926 KB	704	1765	+222	-839	1061	3882	GRN
Wakeman	Lot 12	70		1980	Trolz	1	Peabody	12-22-66	859 KB	679	1790	+180	-931	1111	3936	GRN
Wakeman	Lot 34	71	2057	Murphy	1	Tkach	12-28-66	804 GL	674	1835	+130	-1031	1161	3930	GRN	
JACKSON COUNTY																
Franklin	Sec. 23	76	1825	Halbert	1	Wood	7-8-64	810 GL	1891	2477	-1081	-1687	586	6320	GRN	
Franklin	Sec. 31	79		Halbert	1	Brown	9-17-64	824 GL	1871	2225	-847	-1401	554	5981	Sample	
Hamilton	Sec. 28	78		Halbert	1	Slavens	8-10-64	655 GL	1440	1945	-785	-1290	505	5681	Sample	
Jefferson	Sec. 27	32		312	Ohio Fuel Gas	1	Myers	3-21-47	841 GL	1946	2495	-1105	-1654	549	2750	Sample
Liberty	Sec. 19	72		1023	Conoco	1	Grover	9-24-62	959 GL	1435	1945	-476	-986	510	2241	Sample
Madison	Sec. 30	75	740	Davis	1	Davis	11-2-64	778 DF	2066	2645	-1288	-1867	579	2941	GRN	
Milton	Sec. 29	61		Kewanee	1	Morrow	5-31-58	772 CM	1946	2609	-1174	-1837	663	3075	GRN	
Milton	Sec. 33	62		759	Kewanee	2	Buckeye	10-6-58	766 CM	2007	2670	-1241	-1904	663	2986	GRN
Scioto	Sec. 19	48		569	Williams	1	Murray	11-30-53	646 GL	1180	1645	-534	-999	465	3800	Sample

Township	Land division	Permit and/or map no.	Sample no.	Operator	Well no.	Lease name	Completion date	Elevation of well head (ft)	Depth to "Big Lime" (ft)	Elevation of "Big Lime" (ft)	Thickness of "Big Lime" (ft)	Total depth (ft)	Tops	
JEFFERSON COUNTY														
Island Creek	Sec. 26W	830-A	360-D	Eastern Ohio	1	Wayne	1931	1197 GL	4935	-3738		5315	Sample	
Salem	Sec. 3	281	614	Belden	1	Carney	10-13-53	1062 GL	4728	-3666		4976	Sample	
Salem	Sec. 32	340	1060	Lake Shore	1	Miser	12-16-61	1148 GL	4605	-3457		4871	GRN	
Salem	Sec. 32	353	1913	Gearhart	1	Miser	7-2-65	1127 KB	4559	6354	-3432	-5227	1795	6890
KNOX COUNTY														
Berlin	Fr. sec. 8	1740		Duncan	1	Bixler	12-8-65	1198 DF	1342	2139	-144	-941	797	2286
Berlin	Lot 7 (2Q)	1746		Hallwell	2	Bowers	1-7-66	1126 DF	1316	2140	-190	-1014	824	2318
Butler	Sec. 3	1856		Elkhead	3	Hammond	11-28-66	942 DF	1750	2634	-808	-1692	884	2837
Butler	Sec. 25	1297		Chief	1	Ashcraft	6-23-59	1117 DF	1911	2759	-794	-1642	848	2958
Clay	Lot 15 (1Q)	1336		Rider	2	Henry	11-5-59	1027 DF	1750	2513	-723	-1486	763	2801
Clinton	Lot 20 (3Q)	1535	1261	Pyramid	A-1	Perrin	5-29-64	1203 KB	1388	2157	-185	-954	769	4350
College	Lot 28	1521	1227	Carver-Dodge	1	Hall	4-2-64	1117 KB	1600	2408	-483	-1291	808	4757
Harrison	Lot 25 (1Q)	1307		Heck	1	Jordan	7-25-59	975 DF	1675	2517	-700	-1542	842	2713
Hilliar	Lot 4 (1Q)	1493		Comanche	1	Griffith	12-11-63	1300 DF	1252	1967	+48	-667	715	4042
Hilliar	Lot 9 (3Q)	1489	1161	Atha	1	Cordle	11-7-63	1154 DF	950	1655	+204	-501	705	3903
Howard	Lot 10 (2Q)	1341		Sanders-Thoreen	1	Simmons	3-5-60	990 GL	1549	2416	-559	-1426	867	2628
Howard	Lot 25 (3Q)	1269		Alkire-Floto	1	Sapp	3-21-59	990 DF	1637	2477	-647	-1487	840	2669
Jackson	Sec. 4	1298		Alkire-Floto	1	Rine	6-30-59	1022 DF	1856	2721	-834	-1699	865	2937
Jackson	Sec. 21	1260	783	National	1	Wilt	1-10-59	884 KB	1900	2808	-1016	-1924	908	3117
Liberty	Lot 6 (2Q)	1788	1852	Sohio	1	Horn	4-5-66	1260 KB	1235	2025	+25	-765	790	4162
Middlebury	Sec. 21	1671	1587	Sohio	1	Mann	5-13-65	1103 KB	1230	2008	-127	-905	778	2160
Middlebury	Lot 19 (3Q)	1676	1610	Sohio	1	Fisher	5-15-65	1288 KB	1265	2047	+23	-759	782	4160
Milford	Sec. 10	1468	1055	Ohio Fuel Gas	1	Laramore	1-9-63	1204 KB	1404	2143	-200	-939	739	5376
Milford	Lot 6 (3Q)	1855	1976	Lake Shore	1	Dixon	10-18-66	1227 KB	1316	2052	-89	-825	736	4250
Morris	Lot 8 (1Q)	1507		Cavalier	1	Fearn	2-22-64	1181 KB	1418	2231	-237	-1050	813	4490
Morris	Lot 6 (3Q)	1822		Cavalier; Phillips	1	McKee	6-22-66	1042 KB	1247	2037	-205	-995	790	2207
Pike	Sec. 6N	1418	984	Ringier	1	Drushall	5-3-62	1324 DF	1631	2510	-307	-1186	879	4784
Pike	Sec. 9	1413	1839	Fagan	1	Cunningham	8-7-61	1253 KB	1670	2577	-417	-1324	907	5745
Union	Sec. 19	1529		Hamblin	1	Landis	5-1-64	941 T	1821	2718	-880	-1777	897	2934
Union	Lot 3 (1Q)			V-T	1	Simmons	6-29-55	920 T	1800	2708	-880	-1788	908	2924
Wayne	Lot 8 (1Q)	1629		T & W	1	Bare	3-9-65	1064 DF	1206	1968	-142	-904	762	2180
Wayne	Lot 29 (2Q)	1546		Publishers	1	Reed	6-24-64	1159 KB	1062	1860	+97	-701	798	4118
Wayne	Lot 5 (4Q)	1499		Hudson Ohio	1	Fawcett	11-26-63	1152 KB	1228	2012	-76	-860	784	4215
LAKE COUNTY														
Concord	Lot 12 (tr. 1)	L-10		Wiser	1	Bigly	11-10-39	764 GL	1450	3003	-686	-2239	1553	3286
Concord	Lot 5 (tr. 3)	8	412	Fox & McClenathon	1	Reichert	7-14-48	723 GL	1406	2991	-683	-2268	1585	3277
Concord	Lot 48 (tr. 4)	-3-7	413	Galey	1	Woodruff	6-5-50	722 GL	1387	2966	-665	-2244	1579	3232
Kirtland	Lot 90 (tr. 3)	1	66	East Ohio Gas	1	Andrews	9-26-40	1082 GL	1791	3430	-709	-2348	1639	3756
Mentor	Lot 4 (tr. 10)	3		Benedum-Trees	1	Hawgood	12-28-43	625 GL	1233	2841	-608	-2116	1608	3515
Mentor	Lot 2 (tr. 14)	39	681	Morton	9	N. Y. Central RR.	7-21-55	604 GL	1190		-586		2143	Sample
Painesville	Lot 56 (tr. 4)	81		Diamond Alkali	125	Diamond Alkali	4-27-60	649 KB	1276		-627		2550	GRN
Painesville	Lot 56 (tr. 4)	96		Diamond Alkali	122	Diamond Alkali	2-23-63	621 GL	1188		-587		2476	Driller's
Painesville	City of Painesville	L-267		Diamond Alkali	42	City of Painesville	4-30-57	640 DF	1250		-610		2080	GRN
Willoughby	Lot 4 (tr. 9)	L-108		Sherwin	2	Sherwin	3-10-30	648 GL	1300		-652		3030	Driller's
LAWRENCE COUNTY														
Decatur	Sec. 1	118	311	Ohio Fuel Gas	1	Culbertson	12-9-47	955 GL	2325	2875	-1370	-1920	550	3177
Elizabeth	Sec. 4	162	566	Scott	4	Ironton Brine	2-9-53	627 GL	1885		-1258		2340	Sample
Hamilton	Sec. 5	159	554	Dow	2	Steenbergen	12-3-52	560 GL	1585	2014	-1025	-1454	429	2031
Lawrence	Sec. 14	153	591	Ashland	1	Harting	3-7-53	705 GL	2470		-1765		3451	Sample
Symmes	Sec. 13	174	927	Goldberg	1	Payne	10-1-63	600 GL	2246	2871	-1646	-2271	625	7002
Union	Sec. 14	210	2163	Stewart	1	Riley	6-18-68	540 GL	2903		-2363		2918	GRN
Washington	Sec. 11	170	900	Weed	1	Cambria	1-12-61	900 DF	2147	2703	-1247	-1803	556	2969
Windsor	Sec. 7	206	2150	P. & M.	1	Bucklew	3-8-68	570 T	2507	3159	-1937	-2589	652	3490
Windsor	Sec. 18	197	1987	P. & M.	1	Mootz	3-10-67	562 GL	2545	3190	-1983	-2628	645	3507

Township	Land division	Permit and/or map no.	Sample no.	Operator	Well no.	Lease name	Completion date	Elevation of well head (ft)	Depth to "Big Lime" (ft) Top Base	Elevation of "Big Lime" (ft) Top Base	Thickness of "Big Lime" (ft)	Total depth (ft)	Tops		
LICKING COUNTY															
Bowling Green	Sec. 10	263	361-A	Reliance	1	Prince	7-6-68	1090 GL	1839	2642	-749	-1552	803	2807	Sample
Burlington	Lot 36 (2Q)	2430		Lake Shore	1	Yoakam	11-9-66	994 KB	1270	2020	-276	-1026	750	4357	GRN
Burlington	Lot 5 (3Q)	2051		Southern Triangle	1	Swetnam	11-27-63	1099 KB	1386	2117	-287	-1018	731	4349	GRN
Burlington	Lot 17 (4Q)	2300		Lake Shore	1	Shipley	12-12-65	1230 KB	1637	2391	-407	-1161	754	4796	GRN
Eden	Sec. 7	2130		Moore	1	Beatty	7-30-64	1165 KB	1791	2592	-626	-1427	801	5013	GRN
Eden	Sec. 17	2030	1845	Lake Shore	1	Booth	9-10-63	1140 KB	1775	2570	-635	-1430	795	5023	GRN
Etna	Sec. 5	2272		Lake Shore	1	Snider	10-17-65	1031 KB	1110	1717	-79	-686	607	4020	GRN
Fallsbury	Sec. 2	1971		National	1	Wickham	10-25-62	842 DF	1819	2693	-977	-1851	874	2908	GR
Fallsbury	Sec. 7	1742		Alkire-Floto	1-A	Ashcraft & Frost	8-16-59	1075 T	1874	2726	-799	-1651	852	2948	GRN
Fallsbury	Sec. 11	1782		Natol	3	Ashcraft	3-25-60	972 DF	1933	2828	-961	-1856	895	3065	GRN
Fallsbury	Sec. 21	1838	691	Natol	2	Moran	12-30-60	932 DF	1904	2799	-972	-1867	895	3030	GRN
Franklin	Sec. 9	1376		Waverly	1	Parr	5-10-56	1120 GL	1970	2850	-850	-1730	880	2995	Sample
Granville	Lot 6 (2Q)	2066		Southern Triangle	1	White	12-23-63	1047 KB	1332	2073	-285	-1026	741	4280	GRN
Hanover	Lot 7 (1Q)	1850		Natol	1	Westbrook	4-8-61	867 DF	1807	2669	-940	-1802	862	2903	GRN
Hanover	Lot 21 (4Q)	2350		Olympic	1	Priest	5-22-66	910 DF	1910	2740	-1000	-1830	830	3005	GRN
Harrison	Lot 20 (3Q)	2224	1596	Buckeye	1	Atkinson	6-5-65	989 KB	1072	1670	-83	-681	598	3875	GRN
Hartford	Lot 8 (2Q)	2033		Atha	2	Canaday	10-1-63	1161 KB	1010	1687	+151	-526	677	4227	GRN
Hartford	Lot 2E (4Q)	2047		Atha	2	Martin	11-26-63	1179 KB	1140	1819	+39	-640	679	4027	GRN
Hopewell	Sec. 2	1630		Hudson	1	Myers	5-15-58	902 GL	1923	2753	-1021	-1851	830	2983	GRN
Hopewell	Sec. 9	2551		Barkdull	2	Paul	10-4-67	1052 DF	2140	2960	-1088	-1908	820	3202	GRN
Jersey	Lot 5N (1Q)	2189	1836	Great Basins	1	Chapdelaine-Smith	3-3-65	1147 KB	1168	1855	-21	-708	687	4053	GRN
Liberty	Lot 16 (1Q)	1981		Lake Shore	1	Droke	12-7-62	1307 KB	1442	2165	-135	-858	723	4505	GRN
Lima	Lot 16 (3Q)	2315		Hunting	1-A	Schmelzer	2-18-66	1090 KB	1012	1605	+78	-515	593	3739	GRN
Lima	Lot 16 (4Q)	2609		Benz	1	Moreland	2-29-68	1040 KB	1067	1668	-27	-628	601	3764	GRN
Madison	Lot 10 (1Q)	2351		Hallwell	1	Priest	6-15-66	889 KB	1671	2479	-782	-1590	808	2687	GRN
Mary Ann	Lot 15 (1Q)	1826	1062	Lake Shore	1	Crowley	8-15-61	1060 KB	1812	2620	-752	-1560	808	5991	GRN, sample
Newark	Lot 1 (3Q)	-7-1		394	Wehrle	9	Wehrle	1-1-25	872 GL	1470		-598		4374	Sample
Perry	Sec. 15	2582		Hunting	1-A	Dwiggins	12-29-67	1062 DF	1914	2743	-852	-1681	829	2982	GRN
Perry	Sec. 17	2392		Hunting	1-A	Galbraith	11-5-66	847 DF	1753	2608	-906	-1861	855	2860	GRN
St. Albans	Lot 10 (4Q)	2067		1201	Southern Triangle	1	Preston	1-9-64	1149 KB	1369	2057	-220	-908	688	4253
Union	Sec. 8	2338	1698	Hunting	1-A	Snyder	5-23-66	905 DF	1284	1920	-379	-1015	636	4231	GRN
Union	Lot 12 (2Q)	2294		Lake Shore	1	Deeds	11-26-65	1063 KB	1383	2073	-320	-1010	690	4445	GRN
LOGAN COUNTY															
Jefferson	VMSL 5088	31	1220	Humble	1	Heminger	10-11-62	1385 DF	150	710	+1235	+675	560	2377	GRN
Jefferson				475	U. S. A. Radar Station	3	U. S. A. Radar Station	12-12-31	1540 GL	325		+1215			Sample
LORAIN COUNTY															
Avon	Sec. 26	860	926	Holly	3	Nagle	8-15-13	785 T	1027		-242		2521	GRN	
Avon	Sec. 28	863		Avon	1	Heck	10-20-65	626 DF	948		-322		1073	GRN	
Black River	Tr. 1	914		Diamond	1	City of Lorain	9-22-67	591 DF	650		-59		1611	GRN	
Brighton	Lot 9 (tr. 7)	795		Ohio Fuel Gas	1	Burge	6-16-61	887 GL	973	2105	-86	-1218	1132	4513	GRN
Brownhelm	Lot 38	912		2042	Kapp	1	Ellison	8-28-67	730 KB	686	1842	+44	-1112	1156	4036
Carlisle	Sec. 5	-6-28	-7-120	Ohio Fuel Gas	1	Penfound	6-30-30	751 GL	1081	2285	-330	-1534	1204	2479	Sample
Carlisle	Sec. 15	946		Kapp	1	Spitzer-Jackson	12-21-67	791 KB	1088	2316	-297	-1525	1228	2475	GRN
Eaton	Lot 9	232		Ohio Fuel Gas	1	Depositors Mortgage Loan	4-16-43	796 GL	1194	2493	-398	-1697	1299	2693	Sample
Eaton	Lot 21	-7-120		Ohio Fuel Gas	1	Fieback	8-8-29	829 GL	1251	2523	-422	-1694	1272	2710	Sample
Eaton	Lot 82	920		Kapp	2	Spitzer-Ford	9-14-67	802 KB	1086	2314	-284	-1512	1228	2500	GRN
Grafton	Lot 56	859	2022	Great Basins	1	Maurer	4-15-65	886 KB	1256	2475	-370	-1589	1219	4970	GRN
Grafton	Lot 77	904		Biffle	1	Kaczay	9-12-67	865 GL	1272	2482	-407	-1617	1210	2668	GRN
Grafton	Lot 100	910		Kapp	1	Toole	10-1-67	860 KB	1257	2450	-397	-1590	1193	2653	GRN
Henrietta	Lot 100 (2Q)	908		Kin-Ark	1	Hasenpflug	7-16-67	806 KB	685	1840	+121	-1034	1155	4040	GRN
Henrietta	Lot 8 (3Q)	794		894	Ohio Fuel Gas	1	Born	11-14-60	850 DF	737	1880	+113	-1030	1143	4590
Lagrange	Lot 4	11	563	Ohio Fuel Gas	1	Whitney	2-24-34	793 GL	1025	2187	-232	-1394	1162	2349	Sample
Lagrange	Lot 49	645		Ohio Fuel Gas	1	Noble	10-24-52	823 GL	1125	2350	-302	-1527	1225	2550	Sample
Lagrange	Lot 81	69		Ohio Fuel Gas	1	Luttner	8-24-36	819 GL	1034	2210	-215	-1391	1176	2390	Sample
Penfield	Lot 7 (tr. 1)	265		Ohio Fuel Gas	2	Norris	12-6-43	884 GL	1208	2355	-324	-1471	1147	2518	Sample

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									Top	Base	Top	Base			
Penfield	Lot 46 (tr. 5)	131	2146	Ohio Fuel Gas	1	Buell	5-3-40	857 GL	1278	2460	-421	-1603	1182	2650	Sample
Rochester	Lot 11 (tr. 4)	948		Kubat	1	Churella	3-31-68	996 GL	1073	2244	-77	-1248	1171	4396	Sample
Sheffield	Lot 9	660		International	8	Mackert	11-12-52	620 GL	857		-237			1869	Sample
MAHONING COUNTY															
Austintown	Lot 55 (tr. 7)	66	160	East Ohio Gas	1	Lloyd	9-17-46	1135 GL	3145		-2010			3555	Sample
Berlin	Lot 19 (tr. 2)	20	63	Magnolia	1	Fields	8-29-40	1058 GL	2945	4715	-1887	-3657	1770	5206	Sample
Berlin	Lot 25 (tr. 3)	202	1186	El Paso	1	Winans	4-2-63	1188 KB	3170	4926	-1982	-3738	1756	5300	GRN
Elleworth	Sec. 21	200	1185	East Ohio Gas	1	Cain	3-3-63	1090 T	3080		-1990			5184	Sample
Goshen	Sec. 13	56	249	Ohio Oil	1	Schnell	2-2-46	1120 GL	3222		-2102			3557	Driller's
Poland	Lot 77	11		Phillips	1	Fenton	3-7-37	1145 GL	3785		-2640			4047	Driller's
Smith	Sec. 10	186		Atlas	1	Beadnell	9-22-62	1085 KB	2944	4744	-1859	-3659	1800	5080	GRN
Smith	Sec. 13	239		Dorfman	1	Warren	12-1-67	1148 KB	3123	4930	-1975	-3782	1807	5340	GRN
Smith	Sec. 33	227		Betz	1	Zurbrugg	5-1-66	1068 DF	3115	4880	-2047	-3812	1765	5243	GRN
Springfield	Sec. 16	34		East Ohio Gas	1	Braunstein	11-18-43	1162 GL	3907	5671	-2745	-4509	1764	6059	Driller's
Springfield	Sec. 35	38		East Ohio Gas	1	Smith	11-3-44	1104	4027		-2923			4402	Sample
MARION COUNTY															
Claridon	Sec. 25	18	1093	Adams	1	Gatewood	3-19-63	996 DF	230	970	+766	+26	740	2992	GRN
Richland	Sec. 3	67	1575	Adams	1	Jevass	8-25-64	987 KB	142	884	+845	+103	742	2903	GRN
Richland	Sec. 11	24		Adams	1	Kramer	1-14-64	992 DF	186	932	+806	+60	746	2949	GRN
Tully	Sec. 27	103	1983	Lake Shore	1	Heddings	11-17-66	1035 KB	412	1160	+623	-125	748	3209	GRN
Tully	Sec. 30	11	1059	Lake Shore	1	Crawbaugh	7-22-62	1006 KB	258	1010	+748	-4	752	3052	GRN
MEDINA COUNTY															
Brunswick	Lot 3 (McCurdy Tr.)	1347		Natol	2	Anderson	5-22-62	1140 T	1879	3187	-739	-2047	1308	3355	GRN
Granger	Lot 42 (Remsen Tr.)	1201	812	Wiser	1	Warner	8-25-59	1117 KB	1944	3335	-827	-2218	1391	6731	GRN
Gulldford	Sec. 4	1660		Obermiller	2	Schaub	10-12-67	1058 DF	2038	3278	-980	-2220	1240	3492	GRN
Gulldford	Sec. 30	1662		King	1	Wiese	10-6-67	1002 DF	1933	3206	-931	-2204	1273	3488	GRN
Harrisville	Lot 96	1443		King	3	Hall Growers	12-8-63	905 GL	1510	2650	-605	-1745	1140	2841	Driller's
Hinckley	Lot 54	1325	958	Ohio Fuel Gas	1-B	Cleveland Trust	11-27-61	1000 KB	1685	3097	-685	-2097	1412	5880	GRN
Hinckley	Lot 70	1214	811	Wiser	3-A	Hier	10-25-59	1237 KB	1952	3373	-715	-2136	1421	6031	GRN
Liverpool	Sec. 16	1676	2130	Preston	1	Muehlhaeusler	12-7-67	939 GL	1600	2895	-661	-1956	1295	3077	Sample
Medina	Lot 2	1296	956	Ohio Fuel Gas	1	Deiss	10-9-61	1105 DF	1870	3188	-765	-2083	1318	5861	GRN
Sharon	Lot 23	1587		King	1	Morris	6-4-66	1090 T	2000	3333	-910	-2243	1333	3550	GRN
Sharon	Lot 34	1621		King	1	Hruszkewycz	11-26-66	1125 GL	2060	3429	-935	-2304	1369	3672	GRN
Wadsworth	Lot 24 (tr. 8)	1585		King	1	Bolich	5-7-66	1080 DF	2175	3488	-1095	-2408	1313	3752	GRN
Westfield	Lot 10	1272		King	1	Hawley	8-26-60	1022 T	1737	2891	-715	-1869	1154	3116	GRN
Westfield	Lot 57	1293	990	Ohio Fuel Gas	1	Reynolds	10-10-61	1002 DF	1780	2980	-778	-1978	1200	5454	GRN
MEIGS COUNTY															
Chester	Sec. 11W	1313	827	Ohio Fuel Gas	1	Windham	1-15-60	723 GL	3396	4355	-2673	-3632	959	4812	GRN, sample
Lebanon	Lot 178	1422	2249	Hunting	1-A	Ferrell	1-25-69	628 KB	4136		-3508			4925	GRN
Olive	Lot 23	442	253	Sinclair	1	Longworth	4-22-44	819 GL	3965	5080	-3146	-4261	1115	7466	Sample
MONROE COUNTY															
Bethel	Sec. 2	1434	678	Great Lakes Carbon	1	Scheenberger	11-26-55	850 GL	4862		-4012			5109	Sample
Center	Sec. 6	290	307	South Penn	1	Kerr	5-15-44	1186 GL	5333		-4147			5621	Sample
Franklin	Sec. 10	1163-A		Baker	1	Mallett	4-16-68	891 DF	4684		-3793			4840	GRN
Jackson	Sec. 18	1594	1049	U. S. Government	ARA1	North American	1962	660 KB	5683		-5023			6701	GRN
Switzerland	Sec. 36	1745	2160	Murphy	1	Dongel	6-13-68	1311 DF	6040		-4729			6302	GRN
MORGAN COUNTY															
Bloom	Sec. 17	995		Mucher	1	McElhiney	6-16-61	681 DF	2830	3805	-2149		975	4268	GRN
Bristol	Sec. 9	946		Roberson-Williams	1	Wilson	4-59	997 DF	3420	4482	-2423	-3485	1062	4887	GRN
Deerfield	Sec. 21	1108		Hunting	1-A	Clemans	8-2-66	987 DF	2913	3872	-1926	-2885	959	4195	GRN
Deerfield	Sec. 30	1098		Hoagland	1	Glen	12-7-65	1020 KB	2896	3829	-1876	-2809	933	4236	GRN
Manchester	Sec. 33	1127	1994	Texaco	1	Hill	5-11-67	835 KB	3719		-2884			3260	GRN
Meigsville	Sec. 5	957		Roberson & Williams	1	Hall	5-15-59	930 GL	3384	4444	-2454	-3514	1060	4914	GRN
Penn	Sec. 14	1048		Lawton	1	Hilaman	1-31-64	962 DF	3368	4392	-2406	-3430	1024	4886	GRN
York	Sec. 26W	554	221	Zanesville Tool & Supply	1	Rambo	7-8-47	980 GL	2704		-1724			3981	Sample

Township	Land division	Permit and/or map no.	Sample no.	Operator	Well no.	Lease name	Completion date	Elevation of well head (ft)	Depth to "Big Lime" (ft) Top Base	Elevation of "Big Lime" (ft) Top Base	Thickness of "Big Lime" (ft)	Total depth (ft)	Tops	
MORROW COUNTY														
Bennington	Sec. 21	2869	1433	Minnesota-Ohio Oil	1	Moody	8-9-66	1196 DF	933	1642	+263	-446	709	3694 GRN
Bennington	Lot 10 (2Q)	2136		Hudson Ohio	1	Whipple	10-11-64	1129 KB	704	1459	+425	-330	755	3590 GRN
Canaan	Sec. 7	2313		Hudson Ohio	1	McKinstry	12-30-64	1004 KB	271	1010	+733	-6	739	3020 GRN
Canaan	Sec. 15	2263		Ashland	1	Ramsey	12-5-64	1042 KB	400	1160	+642	-118	760	3200 GRN
Canaan	Sec. 34	1545		Ashland	2	Bush	5-9-64	1039 KB	387	1165	+652	-126	778	3160 GRN
Cardington	Sec. 6	328	1333	Ashland	1	Dutt	12-6-63	1015 KB	287	1043	+728	-28	756	2975 GRN
Cardington	Lot 5E	1957		Kin-Ark	1-A	Mattox	8-28-64	1028 KB	388	1170	+640	-142	782	3150 GRN
Chester	Lot 4 (2Q)	2070		Consolidated	1	Hoffman-Weiler	9-18-64	1155 KB	897	1666	+258	-511	769	3748 GRN
Chester	Lot 14 (4Q)	58		Oil Investment	1	Wood	1-20-63	1227 KB	1144	1891	+83	-664	747	4163 GRN
Congress	Sec. 2	2905		Lake Shore	1	Grogg	9-3-66	1405 KB	1110	1920	+295	-515	810	3980 GRN
Congress	Sec. 24	1593	1586	Williams & Thornhill	1	Smith	5-27-64	1398 KB	1169	1957	+229	-559	788	4015 GRN
Franklin	Sec. 9	568		Keillor & Clark	1	Smith	2-28-64	1223 DF	893	1668	+330	-445	775	3822 GRN
Franklin	Lot 29 (4Q)	2438		Sohio	1	Hohl	5-16-65	1260 KB	1098	1880	+162	-620	782	3910 GRN
Gilead	Sec. 11	223		Affeld & Falese	1	Hull	12-18-63	1080 DF	519	1320	+561	-240	801	3362 GRN
Gilead	Sec. 30	1797		Atha	1	Shaw	8-7-64	1224 KB	808	1586	+416	-362	778	3511 GRN
Harmony	Lot 26 (4Q)	481	1592	Baines	1	Hildebrand	1-10-64	1228 KB	882	1638	+346	-410	756	3676 GRN
Harmony	Fr. sec. 3	2492		Cavaller; Phillips	2	Owen	5-14-65	1203 KB	830	1597	+373	-394	787	3580 GRN
Lincoln	Sec. 17	1895		Kin-Ark	1	Jones	7-27-64	1005 KB	331	1102	+674	-97	771	3075 GRN
Lincoln	Lot 16 (1Q)	677		Baines	1	Powers	3-20-64	1079 DF	543	1314	+536	-235	771	3228 GRN
Lincoln	Lot 23 (1Q)	676		Moore	1	Henry	2-12-64	1075 KB	494	1275	+581	-200	781	3213 GRN
North Bloomfield	Sec. 8	2772	1592	Midland	1	Gladhill	12-20-65	1202 KB	760	1538	+442	-336	778	3607 GRN
North Bloomfield	Sec. 21	2415		Kin-Ark	1	Rankin	3-23-65	1261 KB	840	1621	+421	-360	781	3659 GRN
North Bloomfield	Sec. 23	2290		Kin-Ark	1	Robinson	1-16-65	1362 KB	1033	1820	+329	-458	787	3975 GRN
Perry	Sec. 20	2517		Sohio	1	Lanker	5-30-65	1410 KB	1230	2054	+180	-644	824	4150 GRN
Perry	Sec. 32	2424		Trittipio	1	Levering	3-5-65	1355 KB	1181	2008	+174	-653	827	4000 GRN
Peru	Sec. 7	203	1228	Wood Rider	1	Bennet	10-22-63	1000 GL	333	1100	+687	-100	767	3056 GRN
Peru	Lot 30 (3Q)	2402		Kin-Ark	3	Crawbaugh	5-6-65	996 KB	271	1055	+725	-59	784	3054 GRN
Peru	Lot 21 (4Q)	2914		Ashland	1	Hoyt	9-25-66	1075 KB	555	1315	+520	-240	760	3340 GRN
South Bloomfield	Sec. 6	790		POC	2-A	Ray	3-10-64	1360 KB	1160	1888	+200	-528	728	3918 GRN
South Bloomfield	Sec. 18	114		Ferguson	1	Hollis	8-25-63	1362 DF	1235	1953	+127	-591	718	4010 GRN
Troy	Sec. 18	47	1208	Pan-American	1	Windbigler	10-13-62	1398 KB	1060	1952	+338	-554	892	4890 GRN
Troy	Sec. 20	644		Pan-American	1	Raney	2-21-64	1414 KB	1228	2073	+186	-659	845	4300 GRN
Washington	Sec. 1	2964		Farrar; Young	1	Walker	3-10-67	1204 KB	726	1503	+478	-299	777	3600 GRN
Washington	Sec. 27	2220		Chapel	1	Forrey	1-1-65	1101 KB	564	1335	+537	-234	771	3293 GRN
Westfield	Lot 11 (2Q)	1690		Denton	1	Brandes	7-25-64	960 DF	180	868	+780	-92	688	2770 GRN
Westfield	Lot 11 (2Q)	1776	H & C	1	Fetter	6-30-64	983 KB	153	925	+830	+58	772	3001 GRN	
MUSKINGUM COUNTY														
Adams	Sec. 22	2005	65	Ridge	1	Bradford	10-19-68	1022 KB	2902	3997	-1880	-2975	1095	4375 D
Cass	Sec. 4	1629		Cannon	1	Robinson	9-8-59	900 T	2266	3190	-1366	-2290	924	3454 GRN
Harrison	Sec. 6	146		Shields	1	Updike	9-11-40	920 GL	2920	3915	-2000	-2995	995	4324 Sample
Highland	Sec. 24	1599		Kewanee-Oxford	1	Lake	3-26-59	1012 CM	3100	4207	-2088	-3195	1107	4610 GRN
Hopewell	Sec. 3N	1623		Oxford	4	Shepler	7-16-59	860 GL	2147	3003	-1287	-2143	856	3266 GRN
Hopewell	Fr. Sec. 3S	1559	1612	Lincoln	1	Perine	5-27-58	1020 T	2327	3157	-1307	-2137	830	3444 GRN
Hopewell	Sec. 7S	1820		Oxford	2	Sorg	6-7-65	900 GL	2004	2817	-1104	-1917	813	5277 GRN
Hopewell	Lot 6 (3Q)	1924		Romei & Payne	1	Bendure	6-2-67	977 DF	2254	3106	-1277	-2129	852	3406 GRN
Jackson	Sec. 3	1589		Bears	1	Ashcraft	10-38	780 GL	1950	2844	-1170	-2064	894	3094 GRN
Jackson	Sec. 6	1580		Jebb	1	Phillips	10-9-58	895 GL	1958	2833	-1063	-1938	875	3094 GRN
Licking	4Q	1570	782	National	1	Mattingly	9-25-58	840 GL	2127	2992	-1287	-2152	865	3331 GRN
Newton	Sec. 29	1875		Mershon	3-A	Ohio Power	7-1-66	931 DF	2437	3325	-1506	-2394	888	3640 GRN
Perry	Sec. 4	1657		Barco	1	Ross	7-7-60	956 DF	2852	3920	-1896	-2964	1068	4266 GRN
Perry	Sec. 19	1648		Kewanee	1	Mikolajcik	4-6-60	951 DF	2972	4052	-2021	-3101	1080	4425 GRN
Salem	Sec. 23	1617		Barco	1-B	Winegardner	7-18-59	908 KB	2841	3885	-1933	-2977	1044	4266 GRN
Salem	Sec. 25	1595	779	Barco	1	Cain	1-24-59	942 DF	2747	3759	-1805	-2817	1012	4141 GRN
Salt Creek	Sec. 15	850		National	2	Coffey	6-6-47	710 GL	2805	3872	-2095	-3162	1067	4163 GRN
Salt Creek	Sec. 22	945		National	1	U. S. A.; Stackhouse	12-31-47	970 DF	3055	4117	-2085	-3147	1062	4479 GRN
Springfield	Sec. 17	1600		Wehmeyer	1	Wilkins	3-3-59	788 KB	2247	3094	-1459	-2306	847	3505 GRN
Union	Sec. 13	1640		Barco	1	Tenney	1-12-60	990 DF	3183	4310	-2193	-3320	1127	4672 GRN

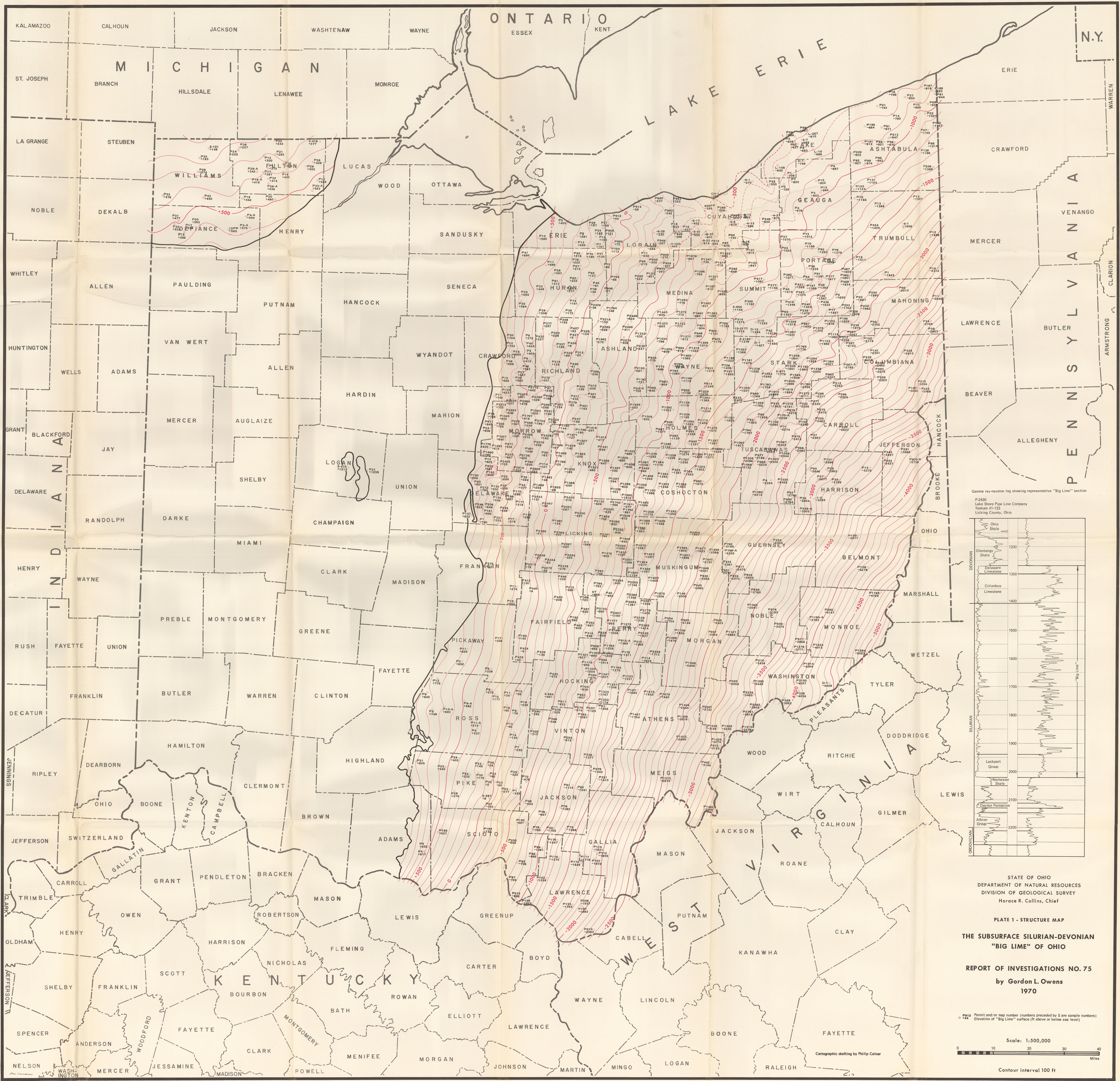
Township	Land division	Permit and/or map no.	Sample no.	Operator	Well no.	Lease name	Completion date	Elevation of well head (ft)	Depth to "Big Lime" (ft) Top Base	Elevation of "Big Lime" (ft) Top Base	Thickness of "Big Lime" (ft)	Total depth (ft)	Tops
NOBLE COUNTY													
Buffalo Center	Sec. 31	658	385	Heivenston	1	Ava	2-10-49	850 GL	3610	-2760		3780	Sample
Elk	Sec. 25	878	608	Sheridan	1	Guiler	3-11-68	840 GL	4023	-3183	-4634	5801	Sample
Elk	Sec. 15	917	607	Great Lakes	1	Pabst	10-30-53	960 GL	4828	-3868		5080	Sample
Elk	Sec. 31	1278	2025	Amerada	1	Ullman	2-1-67	1035 GL	4806	-3771	-5300	11,442	GRN
Enoch	Sec. 10	939	639	Maddox & Johnston	1	Burkhart	1-15-55	1160 GL	4635	-3475		6521	Sample
Noble	Sec. 21	1020	685	Kidd	1	Irvin	2-3-56	888 GL	3929	-3041		5686	Sample
PERRY COUNTY													
Clayton	Sec. 10	2604		Quaker State	9	Adrian	11-14-66	1015 GL	2376	-1361	-2178	817	3490
Clayton	Sec. 33	2128		Oxford	1	Cannon	6-8-61	901 DF	2237	-1336	-2136	800	3358
Coal	Sec. 36	114		Buckeye Supply	162	Sunday Creek	8-3-38	901 GL	2505	-1604	-2501	897	3613
Harrison	Sec. 5	2597		Quaker State	1	Potts	10-18-66	797 DF	2343	-1546	-2404	858	3549
Harrison	Sec. 13	2178	977	Hogan	1	Corven	3-17-62	948 DF	2387	-1439	-2248	809	3517
Hopewell	Sec. 16	2294		White	1	Danison	12-23-63	952 DF	1895	-943	-1710	767	2902
Hopewell	Sec. 31	40		Daily	3	Shrider	11-23-36	1042 DF	1935	-2693	-1651	758	2893
Jackson	Sec. 6	1777		Kinsell	1	Anderson	8-28-56	925 GL	1890	-965	-1695	730	2864
Jackson	Sec. 13	1975		Alkire & Floto	1	Vossler & Manon	2-7-59	995 GL	2231	-1236	-1987	751	3245
Jackson	Sec. 17	1746	675	Garfield & Pasternak	1	Love	10-19-55	850 GL	1858	-1008	-1727	719	2831
Madison	Sec. 18	2055		Lincoln	1	McCullough	2-20-60	1020 GL	2168	-1148	-1938	790	3263
Madison	Sec. 34	2580		Quaker State	2	Coleman	8-25-66	960 DF	2316	-1356	-2166	810	3438
Monday Creek	Sec. 5	1769		Natoli/Belden & Blake	1	Detweiler	6-13-56	1025 GL	2063	-1038	-1779	741	3070
Monroe	Sec. 16	2548		Tatge	1	McArto	6-28-66	740 GL	2453	-1713	-2585	872	3649
Pike	Sec. 11	2389		Worstell	1	Conoway	5-20-65	1022 DF	2436	-1414	-2231	817	3533
Pike	Sec. 23	2126		Natoli	1	Abram	4-18-61	920 GL	2357	-1437	-2243	806	3438
Pleasant	Sec. 6	513	139	Ohio Oil	1	Balyard	10-10-43	980 GL	2549	-1569	-2477	908	3777
Reading	Sec. 20	2153		Blackhawk	1	Miller	9-7-61	980 GL	1970	-990	-1720	730	2912
Reading	Sec. 25E	2447		Duncan & Brazell	1-A	Green	11-16-65	982 GL	2172	-1190	-1975	785	3205
Salt Lick	Sec. 4	915-A		Peabody	1	Peabody	1911	833 GL	2222	-1389	-2267	878	3284
Salt Lick	Sec. 18	178		Swingle	1	Rickett	4-8-40	769 GL	2080	-1311	-2181	870	3200
Thorn	Sec. 24	794	102	Ohio Oil	1	Brown	6-19-42	1085 GL	1878	-793	-1582	789	2897
Thorn	Sec. 36	S		National	6	Beard	5-11-62	1025 GL	1891	-866	-1612	746	2837
PICKAWAY COUNTY													
Deer Creek	VMSL 4016	3	1178	McMahon-Bullington	1	Dunlap	7-30-64	722 KB	70	+652	+240	412	3536
Jackson	VMSL 8526	11		Clarkson	1	Riggin	1-3-65	763 GL	134	+629	+222	407	3090
Pickaway	Sec. 7W	6	1540	Midwest	1	Miller	10-2-64	693 GL	355	+338	-92	430	4179
Walnut	Sec. 33	17	1977	Phillips	A-1	Heffner	9-25-66	630 KB	522	+308	-179	487	3273
PIKE COUNTY													
Beaver	Sec. 5	23	1066	Continental	1	Quinsel	10-11-62	667 KB	944	-277	-675	398	1620
Beaver	Sec. 35	1	263	White	1	Babst	6-14-50	708 GL	1060	-352	-792	440	4227
Benton	VMSL 3255	25	1069	Continental	1	Francis	12-19-62	620 KB	80	+540	+255	285	581
Jackson	VMSL 5559	26	1090	Continental	1	Ewing	2-7-63	572 KB	546	+26	-348	374	992
Jackson	Sec. 10E	35	1971	Ohio Fuel Gas	1	Reisinger	10-17-66	775 KB	1095	-320	-766	446	3999
Pebble	Lot 1324	29	1324	Well Supervision	1	Conley	8-19-64	941 DF	538	+403	+41	362	3612
Pebble	VMSL 2631	22	1339	Wehmeyer	1	Miller	1-31-62	681 GL	449	+232		1089	Sample
Pee Pee	VMSL 2863	30	1396	Well Supervision	1	Nye	8-16-64	872 DF	497	+175	-168	343	3636
Pee Pee	VMSL 8942	33	1659	Katex	1	Easterday	6-11-65	762 KB	617	+145	-232	377	3365
Perry	VMSL 3133	21	1340	Wehmeyer	1	Attinger	11-1-61	939 GL	134	+805		534	Sample
Scioto	Sec. 16		287	Pico	1	Armintrout	1949	703 GL	695	+8	-404	412	3429
Seal	Sec. 13	24	1070	Continental	1	Anderson	10-25-62	696 KB	776	-80	-466	386	1441
Seal	Sec. 15	34	1683	Parker	1	Gregg	8-12-65	686 GL	624	+62	-343	405	3860
Seal	Sec. 19	32	1395	Well Supervision	1	Burton	11-24-64	885 DF	883	+2	-375	377	3384
Sunfish	VMSL 13, 711	28	1154	Shure	1	Williams	9-26-63	634 DF	259	+375	+67	308	2692
Union	Sec. 26	27	1121	Southern Triangle	1	Wooddell	7-15-63	773 DF	966	-193	-567	374	3845
PORTAGE COUNTY													
Atwater	Lot 16	77	912	Atlas	1	Franks	3-14-61	1133 KB	2800	-1667	-3429	1762	4895
Atwater	Lot 124	436		East Ohio Gas	1	Massa	6-17-66	1101 KB	2733	-1632	-3349	1717	4768
Aurora	Lot 7	24	545	Penn	1	Wides	12-18-50	1000 GL	2025	-1025		3307	Sample

Township	Land division	Permit and/or map no.	Sample no.	Operator	Well no.	Lease name	Completion date	Elevation of well head (ft)	Depth to "Big Line" (ft)		Elevation of "Big Line" (ft)		Thickness of "Big Line" (ft)	Total depth (ft)	Tops
									Top	Base	Top	Base			
Aurora	Lot 19	37	643	Belden	1	Thompson	11-10-54	1120 GL	2190	3808	-1070	-2688	1618	4222	Sample
Brimfield	Lot 22	40	721	East Ohio Gas	1	Heichel	4-15-57	1090 T	2300	3965	-1210	-2875	1665	4325	GRN
Brimfield	Lot 64	367		Dusty	1	Varga	2-7-65	1096 KB	2469	4101	-1373	-3005	1632	4410	GRN
Charlestown	Lot 15	117		East Ohio Gas	1	Blackman	4-23-62	1041 KB	2458	4180	-1417	-3119	1702	4450	GRN
Charlestown	Lot 18	81		Brannan	2	Nething	2-22-61	1012 KB	2403	4093	-1391	-3081	1690	4460	GRN
Deerfield	Lot 23	328		Atlas	1	Hartzell	10-8-64	1060 KB	2868	4640	-1808	-3580	1772	4974	GRN
Deerfield	Lot 43	203		El Paso	1	Cherry Federal	8-23-63	1046 KB	2750	4511	-1704	-3465	1761	4921	GRN
Edinburg	Lot 1	49		East Ohio Gas	1	Baily	8-7-59	1032 DF	2415	4125	-1383	-3093	1710	4380	GRN
Edinburg	Lot 2	126	1181	East Ohio Gas	1	Kratz	7-6-63	1170 KB	2717	4427	-1547	-3257	1710	4750	GRN
Franklin	Lot 17	482		Collins & Jones	1	Schlarb	9-28-67	1053 DF	2270	3938	-1217	-2885	1668	4215	GRN
Freedom	Lot 42	85	928	Northern Natural	1-A	Wilson	7-22-61	1170 KB	2463	4135	-1293	-2965	1672	4428	GRN
Freedom	Lot 64 (3Q)	48		Springfield	1	Zimmerman	1-22-59	1247 DF	2545	4240	-1298	-2993	1695	4591	GRN
Mantua	Lot 3	73	910	Northern Natural	1	Frost	1-11-61	1202 DF	2214	3887	-1012	-2685	1673	4214	GRN
Palmyra	Lot 13	2	242	Cashdollar	1	Henderson	3-6-37	1135 GL	2765		-1630			4792	Sample
Palmyra	Lot 17-4	468		Cayman	2	Myers	8-22-67	959 KB	2593	4298	-1634	-3339	1705	4654	GRN
Paris	Lot 28	467		Cayman	1	Hauck	12-22-66	954 KB	2559	4240	-1605	-3286	1681	4645	GRN
Paris	Lot 35	462		Cayman	1	Sabol	12-1-66	956 KB	2557	4253	-1601	-3297	1696	4652	GRN
Randolph	Lot 34	238		Huron	1	Brewer	2-15-64	1192 KB	2662	4376	-1470	-3184	1714	4706	GRN
Randolph	Lot 76	240		East Ohio Gas	1	Meacham	11-25-63	1133 KB	2557	4264	-1424	-3131	1707	4549	GRN
Ravenna	Lot 8 (2Q)	56		Hinton	1	Hinman	5-2-60	1140 GL	2375	4058	-1235	-2918	1683	4337	GRN
Ravenna	Lot 27 (4Q)	64		East Ohio Gas	1	Kovalevski	8-27-60	1071 DF	2380	4082	-1309	-3011	1702	4359	GRN
Rootstown	Lot 15	167		East Ohio Gas	1	Harville	4-16-63	1172 KB	2560	4222	-1388	-3050	1662	7083	GRN
Rootstown	Lot 31	431		Atlas	1	Kapusta	9-20-66	1078 KB	2346	4050	-1268	-2972	1704	4442	GRN
Shalersville	Lot 30	70		Northern Natural	1	Goodell	12-8-60	1137 DF	2335	4019	-1198	-2882	1684	4353	GRN
Suffield	Lot 6	419		Atlas	1	Kemmerly	11-11-65	1100 KB	2448	4095	-1348	-2995	1647	4475	GRN
Suffield	Lot 20 (4Q)	63		Atlas	1	Schweikert	6-20-60	1187 KB	2587	4189	-1420	-3022	1602	4516	GRN
Windham	Lot 53	76	917	Northern Natural	1	Showalter	1-15-61	1100 KB	2478	4152	-1378	-3052	1674	4517	GRN
RICHLAND COUNTY															
Bloomington	Sec. 21	407		Rock Castle	1	Cuppy	2-16-66	1106 DF	1013		+93			1201	GRN
Bloomington	Sec. 34	437		Southern Triangle	1	Winters	9-13-66	1155 KB	1153	2090	+2	-935	937	4341	GRN
Butler	Sec. 29	329	1430	Huron	1	Eval	11-18-64	1198 KB	1322	2292	-124	-1094	970	4500	GRN
Cass	Sec. 2	348	1629	Baines; Pan American	1	Gilger	6-4-65	1083 KB	890	1820	+193	-737	930	3916	GRN
Cass	Sec. 28	303	1281	Hamblin	1	Davies	6-29-64	1072 DF	844	1722	+228	-650	878	3885	GRN
Franklin	Sec. 3	436		S. Triangle; Ferrar-Young	1	Stacker	8-19-66	1092 KB	1084	2016	+8	-924	932	4079	GRN
Franklin	Sec. 15	312	1289	Gallagher	1	Oswalt	7-8-64	1105 KB	1125	2050	-20	-945	925	4275	GRN
Jackson	Sec. 10	337		Sun	1	White	1-6-65	1117 KB	948	1800	+169	-683	852	3930	GRN
Jackson	Sec. 24	322		Sun	1	Stauffer	8-18-64	1222 KB	1133	2010	+89	-788	877	4185	GRN
Jefferson	Sec. 3	401	1827	Tri-State	1	Gatton	12-7-65	1365 KB	1528	2381	-163	-1016	853	4529	GRN
Jefferson	Sec. 29	247		Grantly	1	Layfield	8-21-62	1280 GL	1448	2255	-168	-975	807	2409	GRN
Madison	Sec. 16	448	2040	Empire Reeves	D-1	Reeves	8-19-67	1176 KB	1237	2096	-61	-920	859	5081	GRN
Mifflin	Sec. 17	366	1638	Olympic	1	Reed	8-13-65	1143 KB	1349	2266	-206	-1123	917	4543	GRN
Monroe	Sec. 18	415	1832	Olympic	1	Sauder	3-7-66	1253 KB	1458	2360	-205	-1107	902	4547	GRN
Monroe	Sec. 19	421		Tri-State	2	Mabee	4-18-66	1230 KB	1428	2315	-198	-1085	887	4439	GRN
Plymouth	Sec. 24	377	1658	Graham	1	Stroup	8-8-65	1099 KB	802	1649	+297	-550	847	3683	GRN
Plymouth	Sec. 25	432		McClure	3	Egner	7-27-66	1085 KB	758		+327			1455	GRN
Sandusky	Sec. 36	372		Goss	1	Taylor	8-7-65	1249 KB	948	1760	+301	-511	812	3772	GRN
Springfield	Sec. 10	315		Mansfield	1	Naber	9-8-64	1350 KB	1226		+124			4111	GRN
Troy	Sec. 34	323	1379	Hadson Ohio	1	Augustine	9-20-64	1309 KB	1185	2038	+124	-729	853	4400	GRN
Washington	Sec. 14	400	1826	Tri-State	1	Roberts	11-22-65	1391 KB	1560	2440	-169	-1049	880	4571	GRN
Washington	Sec. 23	411		Tri-State	2	Cooperrider	1-22-66	1434 KB	1666	2542	-232	-1108	876	4900	GRN
Washington	Sec. 31	379		Great Basins	1-A	Kochheiser	8-28-65	1157 KB	1222	2052	-65	-895	830	4300	GRN
ROSS COUNTY															
Buckskin		5	1541	Reliance	1	Fuller	6-25-63	942 DF	193	489	+749	+453	296	2566	GRN
Colerain	Sec. 9	10	1435	Hammerstone; Hadson Ohio	1	Shall	12-5-64	858 KB	918	1400	-58	-542	484	3611	GRN
Colerain	Sec. 19	11	1512	Hammerstone; Hadson Ohio	1	Zeigler	1-7-65	898 KB	864	1290	+34	-392	426	3500	GRN
Colerain	Sec. 36	19	1537	Hammerstone; Hadson Ohio	1	Tar Hollow	3-30-65	820 KB	1050	1514	-230	-684	484	3800	GRN

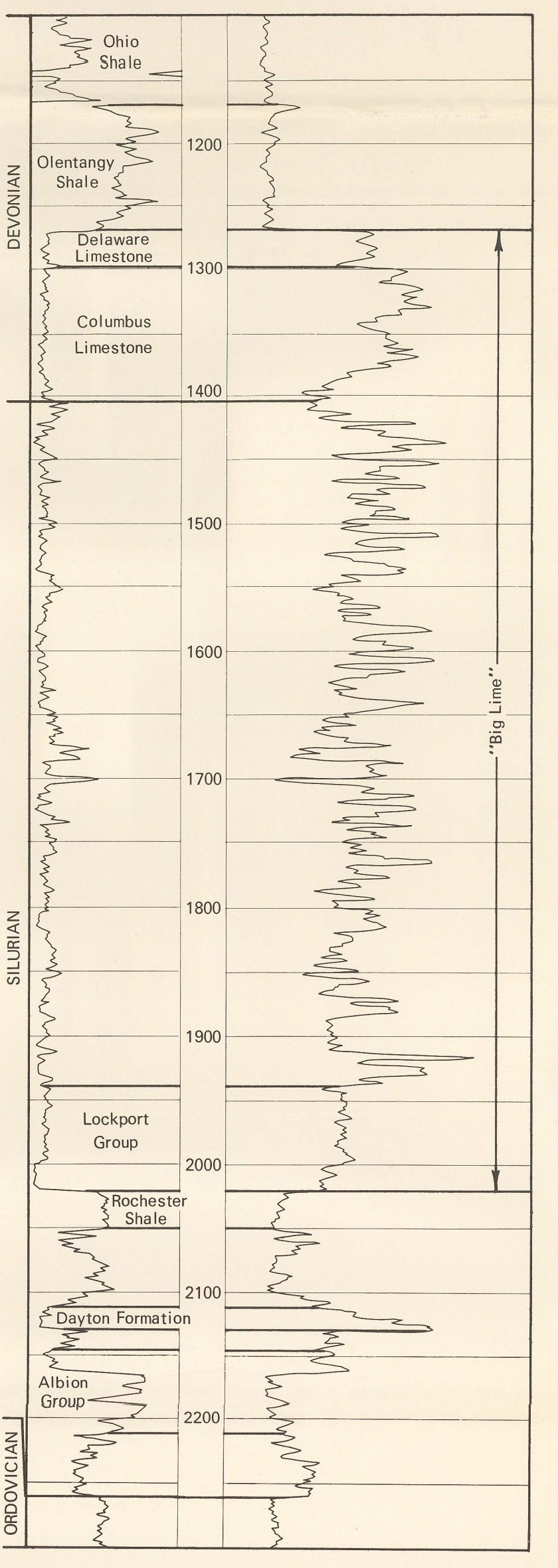
Township	Land division	Permit and/or map no.	Sample no.	Operator	Well no.	Lease name	Completion date	Elevation of well head (ft)	Depth to "Big Lime" (ft)		Elevation of "Big Lime" (ft)		Thickness of "Big Lime" (ft)	Total depth (ft)	Tops
									Top	Base	Top	Base			
Concord		9	1454	Crest	1	Clark	12-29-64	1033 KB	193	503	+840	+530	310	3863	GRN
Concord	VMSL 407	10-A	153	Kissling	1	Perie	1945	830 GL	137	495	+693	+335	358	2325	Sample
Deerfield	VMSL 599	12	1599	Amerada	1	Borreson	12-19-64	832 KB	60	360	+772	+472	300	2458	GRN
Green	Sec. 18	8	1397	Well Supervision	1	Immel	8-24-64	695 DF	423	813	+272	-118	390	4168	GRN
Green	Sec. 28	16	1516	Hammerstone; Hadson Ohio	1	Conaway	2-23-65	871 KB	694	1071	+177	-200	377	3310	GRN
Harrison	Sec. 9	6	1282	Holl & Coffman	1	Coffman	7-6-64	740 KB	816	1280	-76	-540	464	3809	GRN
Harrison	Sec. 30	13	1502	Hammerstone; Hadson Ohio	1	Carper	2-10-65	678 KB	724	1147	-46	-469	423	3421	GRN
Huntington	VMSL 2216	11-A	970	O. S. U. Eng. Expt. Sta.	1	Hirsh	1945	879 GL	564		+315			577	Sample
Huntington	VMSL 4642	4	1072	Continental	1	Wenzel	1-10-63	955 KB	618	1021	+337	-66	403	1066	GRN
Jefferson	Sec. 34	7	1348	Well Supervision	1	Dyer	8-12-64	623 GL	875	1358	-252	-735	483	4198	Sample
Liberty	Sec. 9	14	1513	Hammerstone; Hadson Ohio	1	Cryder	1-23-65	640 KB	770	1202	-130	-562	432	3505	GRN
Springfield	Sec. 1E	18	1524	Hammerstone; Hadson Ohio	1	Scott	3-7-65	827 KB	767	1206	+60	-379	439	3480	GRN
Union	Lot 247	9-A	291	Glenwood	1	Glenwood Park	6-3-38	897 GL	415		+482			2674	Sample
SCIOTO COUNTY															
Bloom	Sec. 30E	84	441	Everman	1	2d National Bank	4-19-51	664 GL	1725		-1061			2434	Sample
Bloom	Sec. 35	86	560	Dow	3	Dow	1-2-53	618 GL	1608		-992			2027	Sample
Brush Creek	VMSL 14887	195	1067	Continental	1	Jones	12-8-62	594 KB	157	400	+437	+194	243	500	GRN
Green	Gervais Grant	212	2161	USS Chemicals	1	USS Chemicals	7-5-68	557 KB	1459	1900	-902	-1343	441	5617	GRN
Green	Sec. 29	87	576	Dow	5	Dow	8-9-53	533 GL	1238		-705			1631	Sample
Harrison	Sec. 17	202	1370	Young & Henneberger	1	Will	4-23-64	923 GL	1427	1832	-504	-909	405	4320	GRN
Madison	Sec. 20E	193	1045	Continental	1	Dever	11-18-62	591 GL	1272	1722	-681	-1131	450	2060	GRN
Porter	Sec. 13	85	447	Rodgers & Wright	1	Hock	3-27-51	650 GL	1358	1780	-708	-1130	422	2174	Sample
Valley	Sec. 5S	194	1068	Continental	1	Shisler	12-1-62	531 DF	651	1043	-120	-512	392	1075	GRN
STARK COUNTY															
Bethlehem	Sec. 17	1783		East Ohio Gas	1	Gerst	5-12-68	1056 KB	2760	4160	-1704	-3104	1400	4480	D
Bethlehem	Sec. 21	949		Natural Gas W. Va.	1	Biedenbaugh	11-6-53	977 GL	2745	4107	-1768	-3130	1362	4403	GRN
Canton	Sec. 12	1209		Tri-State	1	Lincoln Realty	6-14-67	1199 KB	3050	4618	-1851	-3419	1568	4922	GRN
Canton	Sec. 19		877	Ashland	GS1	Brine storage		1077 KB	2856		-1779			4218	GRN
Jackson	Sec. 5	D-1		East Ohio Gas	4	Rohr	7-27-60	1079 DF	2506	3980	-1427	-2901	1474	4231	GRN
Jackson	Sec. 10	D-3		East Ohio Gas	2	Hixon	3-24-60	1174 DF	2624	4132	-1450	-2958	1508	4411	GRN
Lake	Sec. 9	1036		Atlas	1	Miller	4-15-60	1125 GL	2643	4202	-1518	-3077	1559	4479	GRN
Lake	Sec. 21	1007		East Ohio Gas	1	Yoder	7-29-58	1157 DF	2688	4271	-1531	-3114	1583	4545	GRN
Lawrence	Sec. 1	2-2180		East Ohio Gas	2	Rohr	3-8-61	1141 DF	2519	3952	-1378	-2811	1433	4213	GRN
Lawrence	Sec. 22	1020		East Ohio Gas	1	Tippel	5-30-59	973 DF	2341	3713	-1368	-2740	1372	4005	GRN
Lexington	Sec. 14	1103	1911	East Ohio Gas	1	Battershell	4-10-66	1049 KB	2927	4634	-1878	-3585	1707	5012	GRN
Marlboro	Sec. 19	967		National	1	Hall	4-20-55	1115 GL	2765	4380	-1650	-3265	1615	4672	GRN
Marlboro	Sec. 26	1072		East Ohio Gas	1	Warner	9-1-64	1162 KB	2935	4596	-1773	-3434	1661	4935	GRN
Nimishillen	Sec. 32	1249		Mansfield	1	Bosler	7-28-67	1167 KB	3008	4609	-1841	-3442	1601	4971	GRN
Nimishillen	Sec. 36	1294		Mansfield	1	Kiko	9-6-67	1198 KB	3150	4813	-1952	-3615	1663	5156	GRN
Osnaburg	Sec. 7	1162		Tri-State	1	Bikali	4-13-67	1172 KB	3032	4629	-1860	-3457	1597	4981	GRN
Osnaburg	Sec. 15	1258		Tri-State	1	Best	8-4-67	1200 KB	3235	4830	-2035	-3630	1595	5197	GRN
Osnaburg	Sec. 30	1264		Atlas	1	Barnett	9-14-67	1231 KB	3179	4763	-1948	-3532	1584	5135	GRN
Paris	Sec. 8	1364		Mansfield	1	Gram	11-25-67	1219 KB	3246	4883	-2027	-3664	1637	5242	GRN
Paris	Sec. 32	963		Natural Gas W. Va.	1	Czekonski	10-14-54	1130 GL	3337	4944	-2207	-3814	1607	5383	GRN
Perry	Sec. 28	1024		East Ohio Gas	1	Cincinat	8-10-59	1060 GL	2702	4127	-1642	-3067	1425	4420	GRN
Pike	Sec. 1	1839		Refiners	2	Sickafoose	8-20-68	1116 KB	3104	4629	-1988	-3513	1525	5031	D
Pike	Sec. 17	1918		Mansfield	1	Shonk & Sickles	10-6-68	973 KB	2867	4315	-1894	-3342	1448	4699	GRN
Pike	Sec. 18	1910		Mansfield	1	Peden	9-9-68	1010 KB	2909	4335	-1899	-3325	1426	4690	GRN
Plain	Sec. 25	1769		Petrocon	2	McNurlin	2-27-68	1100 KB	2876	4462	-1776	-3362	1586	4848	GRN
Sandy	Sec. 5	1792		Cayman	1	Van Voorhis	3-15-68	1019 KB	3075	4638	-2056	-3619	1563	5020	GRN
Sandy	Sec. 19	1272		Stocker & Sitler	1	Sickafoose	8-15-67	1108 KB	3219	4733	-2111	-3625	1514	5111	GRN
Sugar Creek	Sec. 11	1329		Belden & Blake	1	Carl	9-1-67	999 KB	2530	3910	-1531	-2911	1380	4238	GRN
Sugar Creek	Sec. 34	235	112	Ohio Oil	1	Kayler	1-1-43	1005 GL	2637	4038	-1632	-3033	1401	4368	Sample
Tuscarawas	Sec. 11	1181		Belden & Blake	1	Shammo	8-24-67	1064 KB	2540	3961	-1476	-2897	1421	4243	GRN
Tuscarawas	Sec. 13	1378		Belden & Blake	1	Webb	10-2-67	1095 KB	2597	4026	-1502	-2931	1429	4320	GRN
Washington	Sec. 1	1118		Zenith	1	Crawford	10-14-66	1190 KB	3170	4890	-1980	-3700	1720	5315	GRN
Washington	Sec. 10	1133		Tri-State	1	Russell & Hoffman	1-30-67	1268 KB	3250	4963	-1982	-3695	1713	5361	GRN

Township	Land division	Permit and/or map no.	Sample no.	Operator	Well no.	Lease name	Completion date	Elevation of well head (ft)	Depth to "Big Lime" (ft)		Elevation of "Big Lime" (ft)		Thickness of "Big Lime" (ft)	Total depth (ft)	Tops
									Top	Base	Top	Base			
SUMMIT COUNTY															
Bath	Lot 21	292		Belden & Blake	1	Laughlin	12-20-60	1175 KB	2023	3477	-848	-2302	1454	6101	GRN
Boston	Lot 2	121		Cassidy	1	Cassidy	9-10-40	905 GL	1720		-815			3018	Driller's
Coventry	Lot 10	366		Diamond	16	Diamond	3-11-60	1000	2182	3653	-1182	-2653	1471	3165	GRN
Franklin	Sec. 17	314		East Ohio Gas	1	Cox	2-13-57	1060 GL	2333	3710	-1273	-2650	1377	3972	GRN
Franklin	Sec. 28	10-2177		East Ohio Gas	10	Smith	4-28-61	1021 DF	2335	3707	-1314	-2686	1372	3962	GRN
Green	Sec. 7	D-10		East Ohio Gas	1	Castello	1-16-31	1019 DF	2372	3820	-1353	-2801	1448	4039	GRN
Green	Sec. 31	D-12		East Ohio Gas	4	Rayl	9-20-60	1046 KB	2440	3873	-1394	-2827	1433	4139	GRN
Green	Sec. 36	42		Obermiller	1	Burgoon	2-2-40	1165 GL	2683		-1518			2975	Sample
Northampton	Lot 71	103		East Ohio Gas	1	Wheatley	8-22-57	910 GL	1757	3288	-847	-2378	1531	3455	GRN
Norton	Lot 64		955	P. P. G.	3	Core test	12-10-39	1045 GL	2189		-1144			2851	Sample
Stow		417		Cuyahoga Falls	1	Cuyahoga Falls	12-14-66	1010 DF	2091		-1081			3015	GRN
Tallmadge	Lot 6	377		Brannon	1	Strietenberger	3-8-61	1147 T	2303	3924	-1156	-2777	1621	4310	GRN
TRUMBULL COUNTY															
Bazetta	Lot 9	-4-1				Hadsell		1000 GL	2656		-1656			3710	Driller's
Bloomfield	Lot 148	13		Northern Natural	1-A	Franchich	7-30-60	904 KB	2293	3710	-1389	-2806	1417	4055	GRN
Braceville	Sec. 11	19		East Ohio Gas	1	Pirtz	8-14-64	973 GL	2484	4136	-1511	-3163	1652	4490	Driller's
Farmington	Lot 90	434		Robinson	1	Reibel	12-9-32	850 GL	2255		-1405			4221	Driller's
Gustavus	Lot 77	15	897	Northern Natural	2-A	Runckle	9-6-60	1141 KB	2648	4049	-1507	-2908	1401	4356	GR
Hartford	Lot 25	12		Dinger	1	Blaney	5-15-60	1204 GL	3150	4673	-1946	-3469	1523	3028	GRN
Hubbard	Lot 29	18		Bowman	1	Lackwasky	6-20-64	1000 T	3312		-2312			5201	Driller's
Lordstown	Lot 20	1	75	Magnolia	1	Giovannone	3-20-42	940 GL	2785	4432	-1845	-3492	1647	3082	Sample
Mesopotamia	Lot 48	16		Northern Natural	1-A	Wengerd	11-27-60	1038 KB	2204	3675	-1166	-2637	1471	3994	GR
TUSCARAWAS COUNTY															
Auburn	Sec. 18W	1060		Quaker State	1	Miller	1-22-68	1120 KB	2933	4151	-1813	-3031	1218	4561	GRN
Clay	Sec. 22	4	41	Ohio Fuel Gas	1	Carothers	11-23-36	1150 GL	3504	4927	-2354	-3777	1423	5289	Sample
Clay	Lot 7	965		Stocker & Sittler	1	Keffer	2-8-66	997 KB	3232	4565	-2235	-3568	1333	4950	GRN
Dover	Lot 30	66	209	Brendel	3	Robinson	4-6-40	905 GL	2863	4278	-1858	-3373	1415	4623	Sample
Dover	Lot 33	1102		Quaker State	1	Helwig	9-16-68	1197 KB	3277	4677	-2080	-3480	1400	5080	D
Fairfield	Sec. 3	170-A	302	Rippell & Euga	1	Weaver	5-12-31	922 GL	3180	4725	-2258	-3803	1545	5006	Sample
Fairfield	Sec. 14	71	58	Brendel	1	Desseker	6-4-40	1100 GL	3374	4855	-2274	-3755	1481	5153	Sample
Franklin	Sec. 9	93	248	Columbian	1	Smith	2-11-41	936 DF	2859	4240	-1923	-3304	1381	4477	Sample
Goshen	Lot 39	1067		East Ohio Gas	A-2	Cross Creek	6-17-68	887 KB	3212	4576	-2325	-3689	1364	5015	D
Jefferson	Sec. 12	1068		Quaker State	1	Bender	2-5-68	1066 KB	3198	4474	-2132	-3408	1276	4882	GRN
Jefferson	Sec. 19	1036	2071	Quaker State	1	Brokaw	9-29-67	1105 KB	3201	4481	-2096	-3376	1280	4919	GRN
Lawrence	Fr. sec. 15	1056		Quaker State	1	Walleck	1-22-68	1063 KB	2855	4209	-1792	-3146	1354	4610	GRN
Lawrence	Lot 71	512		Natural Gas W. Va.	3	Streb	12-30-53	1076 DF	3031	4415	-1955	-3339	1384	4849	GRN
Oxford	Lot 11	1082		Alliance	1	Coshen	5-15-68	849 KB	3063	4345	-2214	-3496	1282	4741	GRN
Perry	Sec. 20	890		Kin-Ark	1	Fitzgerald	8-12-63	1201 DF	3985		-2784			4187	GRN
Rush	Sec. 25	1030	2073	Stocker & Sittler	2	Huebner	9-23-67	1221 KB	3676	5078	-2455	-3857	1402	8221	GRN
Sandy	Lot 3	1018		Oxford	1	James	8-28-67	1041 GL	3202	4647	-2161	-3606	1445	5093	GRN
Sandy	Lot 10	676		Status	1	Sattler	1-21-57	940 GL	3152	4575	-2212	-3635	1423	4920	GRN
Sugar Creek	Sec. 21	794		National Associated	1	Borntrager	8-1-59	1031 KB	2828	4128	-1797	-3097	1300	4512	GRN
Union	Sec. 27	966		Atlas Minerals	1	Scalia	6-28-66	901 KB	3484	4939	-2583	-4038	1455	5400	GRN
Warren	Sec. 32	875		Atlas Exploration	1	Edwards	10-28-62	1122 KB	3534	4969	-2412	-3847	1435	5360	GRN
Warren	Sec. 35	100	79	East Ohio Gas	1	Muskingum Watershed	5-13-41	925 GL	3215	4725	-2290	-3800	1510	5130	Sample
Warwick	Sec. 1	1032		East Ohio Gas	1	Berlandis	10-23-67	1042 KB	3366	4725	-2324	-3683	1359	5175	GRN
Warwick	Sec. 10	1020		Quaker State	1	Simmons	8-2-67	1223 KB	3525	4879	-2302	-3656	1354	5251	GRN
Warwick	R. 1, Twp. 8 (2Q)	1058		East Ohio Gas	1	Hibbs	12-14-67	871 KB	3215	4594	-2344	-3723	1379	4990	GRN
York	Sec. 14	977		East Ohio Gas	1	Johnson-Utz	8-21-66	1159 KB	3345	4689	-2186	-3530	1344	5070	GRN
VINTON COUNTY															
Brown	Sec. 36	61	540	Waverly	1	Ward	8-12-52	753	1955	2720	-1202	-1967	765	2973	Sample
Eagle	Sec. 10	290		Ashland	1	Mead	3-7-63	787 DF	1182	1690	-395	-903	508	1983	GRN
Elk	Sec. 19	254		Harris & Locke	2	Perry	12-15-60	972 DF	1887	2498	-915	-1526	611	2784	GRN
Harrison	Sec. 6	302	1347	Well Supervision	1	Brown	7-24-64	628 DF	938	1478	-310	-850	540	4071	GRN
Jackson	Sec. 7	202		Ohio Fuel Gas	3	Turner	4-15-60	945 DF	1470	2038	-525	-1093	568	2293	GRN
Jackson	Sec. 18	266		Ohio Fuel Gas	1	Sowers	2-22-61	920 DF	1468	2050	-548	-1130	582	2320	GRN

Township	Land division	Permit and/or map no.	Sample no.	Operator	Well no.	Lease name	Completion date	Elevation of well head (ft)	Depth to "Big Lime" (ft)		Elevation of "Big Lime" (ft)		Thickness of "Big Lime" (ft)	Total depth (ft)	Tops
									Top	Base	Top	Base			
Swan	Sec. 2	207		Roberson & Williams	1	Maxwell	5-21-60	783 DF	1903	2631	-1120	-1848	728	2872	GRN
Swan	Sec. 5	274		Pettibone, Kropp, & Kaiser	1	Pettibone	11-30-61	960 GL	1874	2568	-914	-1608	694	2792	GRN
Swan	Sec. 14	195		Ridgedale	1	Schurtz	10-21-60	912 DF	2009	2716	-1097	-1804	707	2958	GRN
Vinton	Sec. 35	331	2015	Baird	1	State of Ohio	2-18-67	720 GL	2130	2878	-1410	-2158	748	3225	Sample
Vinton	Sec. 35	338	2026	Midwest	2	State of Ohio	7-17-67	905 DF	2282		-1377			2294	GRN
Wilkesville	Sec. 36	279	976	Lynn	1	Leach	3-9-62	977 GL	2320	3033	-1343	-2056	713	3402	Sample
WASHINGTON COUNTY															
Adams	Lot 49	210	108	Columbian	1	Augenstein	2-15-42	802 DF	4240		-3438			4443	Sample
Belpre	Sec. 8	1515	506	Ohio Fuel Gas	1	Houser	5-16-52	647 GL	4125		-3478			4253	Sample
Belpre	Sec. 31	1529	492	Deem	1	Walker	4-12-52	625 GL	3875		-3250			4110	Sample
Decatur	Sec. 8	1538	491	Mid-East	1	Riddle	4-16-52	798 GL	3966		-3168			4057	Sample
Independence	Sec. 10	D-1		Penn Ohio; Benedum-Trees	1	Knowlton	5-19-33	1001 GL	5439	7270	-4438	-6269	1831	7889	Sample
Lawrence	Sec. 25	359	168	Sinclair Prairie	1	Hill	9-16-44	894 GL	4930		-4036			5205	Sample
Lawrence	Sec. 28	3100		Amerada	1	Harmon	5-11-67	1015 KB	5052		-4037			5067	GRN
Liberty	Sec. 20	1914	633	Great Lakes	1	Scott	6-16-55	904 GL	4908	6410	-4004	-5506	1502	6863	Sample
Marietta	Sec. 17	369	1190	East Ohio Gas	1	Hall	11-12-44	778 GL	4700		-3922			5089	Sample
Palmer	Sec. 32	303	481	Columbian	1	Stoller	7-25-40	788 GL	3842		-3054			3991	Sample
Warren	Sec. 14	2582		Columbian	1	Gustke	5-31-62	688 KB	4290		-3602			4489	GRN
Warren	Sec. 29	2238	50	Columbian	1	Amon	6-4-41	930 GL	4415		-3485			4651	Sample
Warren	Lot 271	2761		Cities Service	1	Stone	6-13-63	600 GL	4219		-3619			4434	GRN
Watertown	Lot 29	1552	557	Shearer	1	Farley	8-9-52	733 GL	4182		-3449			4317	Sample
Wesley	Sec. 2	2681		Atlas	1	Pahl	10-29-62	967 KB	3710	4783	-2743	-3816	1073	5238	D
WAYNE COUNTY															
Baughman	Sec. 4	925		East Ohio Gas	1	Brillhart	7-9-59	1118 DF	2296	3624	-1178	-2506	1328	3872	GRN
Baughman	Sec. 25	1189		Ohio Fuel Gas	1	Eberly	8-18-61	1030 DF	2363	3702	-1333	-2672	1339	6549	GRN
Canaan	Sec. 10	1123		Admiral	1	Frery	9-2-60	1040 GL	1817	2975	-777	-1935	1158	3247	GRN
Canaan	Sec. 25	1377		Kin-Ark	2	Zook	11-5-63	1071 KB	1984	3171	-913	-2100	1187	3393	GRN
Chester	Sec. 15	1434		Sun	1	Martin	10-14-65	1210 KB	2019	3090	-809	-1880	1071	5750	GRN
Chippewa	Sec. 20	822		East Ohio Gas	4	Steiner	1-2-59	950 GL	2091	3391	-1141	-2441	1300	3639	GRN
Chippewa	Sec. 23	726		East Ohio Gas	2	Moine	7-18-58	1020 GL	2213	3551	-1193	-2531	1338	3774	GRN
Clinton	Sec. 1E	987		Arrowhead	1	Johnson	12-31-59	972 DF	1926	2990	-954	-2018	1064	3227	GRN
Clinton	Sec. 16	366	616	Ohio Fuel Gas	3	Basquin	10-29-53	958 GL	1800	2865	-842	-1907	1065	3053	Sample
Congress	Sec. 8	1333		Ohio Fuel Gas	10	Fair	12-11-62	1131 KB	1794	2867	-663	-1736	1073	5336	GRN
Congress	Sec. 26	1030		Schultz	1	Boreman	2-25-60	1064 DF	1860	2970	-796	-1906	1110	3148	GRN
East Union	Sec. 10	833		Heyser	1	Yoder	11-22-58	1184 KB	2403	3602	-1219	-2418	1199	3804	GRN
Franklin	Sec. 21	852		Vanson	2	Plant	2-5-59	1086 DF	2238	3330	-1152	-2244	1092	3569	GRN
Franklin	Sec. 33	1148		Natol	2	Grosjean	12-14-60	957 DF	2075	3171	-1118	-2214	1086	3370	GRN
Green	Sec. 8	1398		Gower	1	Schrock	8-10-64	1128 KB	2138	3320	-1010	-2192	1182	3587	GRN
Green	Sec. 19	1466	2148	Great Lakes	1	Ramseyer	3-27-66	1139 KB	2221	3301	-1082	-2162	1080	6160	GRN
Milton	Sec. 8	801		National Associated	1	Miller	10-14-58	972 KB	1876	3100	-904	-2128	1224	3385	GRN
Milton	Sec. 31	846		Wehmeyer	1	Reusser	12-5-58	1120 KB	2085	3270	-965	-2150	1185	3533	GRN
Plain	Sec. 6	834		Acitelli & Hackel	1	Guenther	12-3-58	1100 GL	1870	2928	-770	-1828	1058	3184	GRN
Plain	Sec. 22	773		Marks & Richmond	3	Kauffman	7-2-58	1165 GL	2061	3103	-896	-1938	1042	3346	GRN
Salt Creek	Sec. 10	814		Sanders	1	Swartzentruber	12-6-58	1180 GL	2479	3658	-1299	-2478	1179	3984	GRN
Salt Creek	Sec. 21	1229		Ohio Fuel Gas	1	Petersheim	10-8-61	1152 DF	2430	3593	-1278	-2441	1163	3862	GRN
Sugar Creek	Sec. 13	708		Wiser	1	Withrich	4-1-58	1220 GL	2828	3933	-1408	-2713	1305	4162	GRN
Sugar Creek	Sec. 24	737		Shields	1	Sword	6-27-58	1100 GL	2550	3858	-1450	-2758	1308	4089	GRN
Wayne	Sec. 14	1419	1944	Great Lakes	1	Drake	9-15-65	1151 KB	2173	3305	-1022	-2154	1132	4697	GRN
Wayne	Sec. 17	894		Vanson	1	Boreman	4-16-59	1166 KB	2084	3180	-918	-2014	1096	3374	GRN
Wooster	Sec. 18	790		Phillips	1	Stockdale	8-31-58	903 DF	1976	3090	-1073	-2187	1114	3298	GRN
Wooster	Sec. 21	793		Vanson	1	Koorn	2-3-59	855 DF	1938	2973	-1083	-2118	1035	3278	GRN
WILLIAMS COUNTY															
Jefferson	Sec. 18	28		McClure	1	Kasper	9-14-59	889 DF	615	1485	+274	-596	870	2885	GRN
Madison	Sec. 5	30	924	McClure	1	Barnhart	6-9-61	868 DF	685	1598	+183	-730	913	3119	GRN
Madison	Sec. 26		121	Ro-Kin-Da	1	Hendricks	12-2-42	889 GL	740	1695	+149	-806	955	2523	Sample
Pulaski	Sec. 20	43	1934	Eastern	1	Sinn	6-8-66	735 GL	285	1197	+450	-462	912	2000	Sample
St. Joseph	Sec. 21	33		Walton	1	Kennerk	11-7-63	848 DF	472	1288	+376	-440	816	2224	GRN



Gamma ray-neutron log showing representative "Big Limestone" section
P-2430
Lake Shore Pipe Line Company
Kokam #1-123
Licking County, Ohio

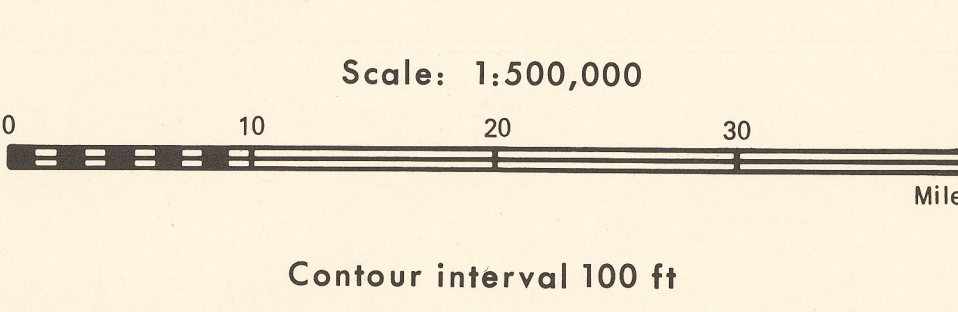


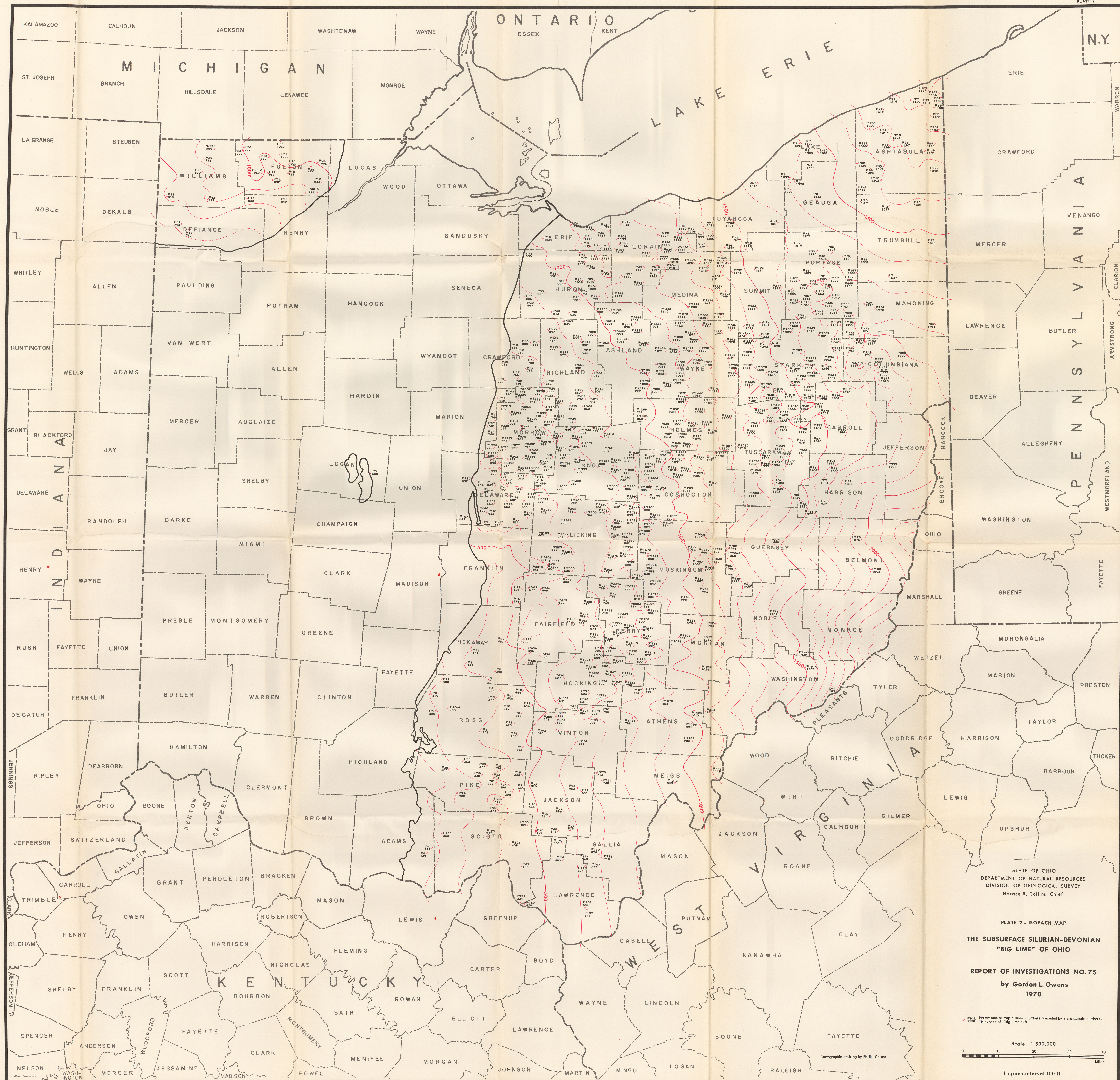
STATE OF OHIO
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF GEOLOGICAL SURVEY
Horace R. Collins, Chief

PLATE 1 - STRUCTURE MAP
THE SUBSURFACE SILURIAN-DEVONIAN
"BIG LIME" OF OHIO

REPORT OF INVESTIGATIONS NO. 75
by Gordon L. Owens
1970

P12 Permit and/or map number (numbers preceded by S are sample numbers)
744 Elevation of "Big Limestone" surface (ft above or below sea level)





STATE OF OHIO
DEPARTMENT OF NATURAL RESOURCES
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Horace R. Collins, Chief

PLATE 2 - ISOPACH MAP

THE SUBSURFACE SILURIAN-DEVONIAN
"BIG LIME" OF OHIO

REPORT OF INVESTIGATIONS NO. 75
by Gordon L. Owens
1970

Scale: 1:500,000

Isopach interval 100 ft

Cartographic drafting by Philip Cefnar

0 10 20 30 40
Miles